ATLAS
STELLARUM VARIABILIUM

SERIES V.

ATLAS

STELLARUM VARIABILIUM.

SERIES QUINTA,

TOTIUS CAELI STELLAS VARIABILES COMPLECTENS,

QUARUM LUX MINIMA EST SUPRA MAGNITUDINEM 7^M,

COMPOSITA

A

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ET TYPIS DESCRIPTA SUBSIDIIS

CL. DOMINAE CATHARINAE W. BRUCE.

BEROLINI,
APUD FELICEM L. DAMES,
MCMVI.

Typ. O. Bonde, Altenburg.

Aus der Vorrede zur V. Serie des Atlas Stellarum Variabilium.

Die Einteilung des Atlas der veränderlichen Sterne in drei Hauptklassen ist zu dem Ende gemacht worden, dass jede Klasse einer gewissen instrumentalen Ausrüstung entspreche, durch welche dieselbe vollständig beobachtet werden kann.

Es ist aus den veröffentlichten Serien I, II, III bekannt, dass die erste Klasse die schwächsten veränderlichen Sterne enthält und somit grössere Instrumente erfordert. Die zweite Klasse, die als Serie IV erscheinen wird, entspricht der Bonner Durchmusterung, sowohl was die Grenze der Sterngrössen anbelangt, als auch die Instrumente, die zu ihrer Fertigstellung von Nöten waren. Das sind nämlich die kleineren der äquatorial aufgestellten Refraktoren. Diese V. Serie endlich, welche die dritte Klasse bildet, enthält jene veränderlichen, welche entweder mit freiem Auge oder in kleinen Handinstrumenten sichtbar sind.

Bei der Herstellung dieser Serie nun wurde der Mangel eines geeigneten Fernrohres sehr vermisst. Vielfache Versuche machten klar, dass die gewöhnlichen Operngläser oder Feldstecher dem gegenwärtigen Zwecke nur unvollkommen entsprechen. Da erschien in den Annalen von Moskau (IV, 1902, p. 121) die Beschreibung eines Instrumentes von Steinheil Söhne, das diesem Mangel abzuhelfen versprach. Der Unterzeichnete stellte nun an diese bekannte optische Firma das Ansuchen, ein ähnliches Doppelfernrohr speziell für die Zwecke dieser V. Serie zu konstruiren und ihm zur Prüfung zu übersenden, worauf dieselbe auch bereitwilligst einging.

Das übersandte Instrument hat ausser dem gewöhnlichen Okularauszug noch eine Vorrichtung, die beiden Rohre dem gegenseitigen Abstande beider Augen anzupassen. Ueberdies ist das eine der Objektive verschiebbar, um der verschiedenen Sehweite der beiden Augen des Beobachters Rechnung zu tragen. Die freie Oeffnung der Objektive ist 34 mm und das Gesichtsfeld ist $7^1/_2$ Grad. Die Bilder erscheinen umgekehrt, mit fünffacher Vergrösserung und 49 facher relativer Lichtstärke.

Obwohl eine ganze Reihe von sogenannten Binokeln zur Vergleichung dieser Karten mit dem Himmel benutzt wurde, hielten dieselben doch mit diesem Steinheilschen Doppelfernrohr den Vergleich in keiner Weise aus. Wir nehmen deshalb keinen Anstand, dasselbe allen Denen, welche diese V. Serie benutzen wollen, als das geeignetste Instrument zu empfehlen.

J. G. Hagen S. J.

Extract from the Preface to Series V of the Atlas Stellarum Variabilium.

The division of the Atlas of Variable Stars into three principal parts was made for the purpose of adapting each part to a certain instrumental equipment by which it could be conveniently observed.

From Series I, II, III already published, it is evident that the first part contains the fainter variables and requires larger instruments. The second part, to appear as Series IV, will correspond to the Bonner Durchmusterung both in stellar magnitude, i. e. down to the tenth, and in instrumental equipment, viz. smaller equatorials. This Series V, which forms the third part, contains the variables visible to the naked eye and those requiring the aid of an opera glass.

In preparing this Series the need of a suitable glass was keenly felt. After repeated tests had proved the insufficiency of the ordinary opera glass, volume IV of the Annals of Moscow of 1902 described on page 121 an instrument by Steinheil Sons which promised success. They promptly acceeded to our request to produce an instrument of this discription which would meet the requirements of Series V.

The instrument sent for trial has first the ordinary focusing adjustment of the opera glass, second a lateral motion conforming the distance of the tubes to the range of the observers eyes, and third a special device for focusing the two objectives independently. The free aperture of the object glasses is 34 mm and the field is $7^1/_2$ degrees. The images appear inverted and magnified 5 times. The relative light intensity is 49.

Although we have used quite a number of binoculars in comparing these charts with the sky, no one of them was in the same class with the Steinheil instrument. We have no hesitation in consequence in recommending the latter to all who use these charts as the best suited to the purpose.

J. G. Hagen. S. J.

PRAEFATIO.

Atlas Stellarum Variabilium divisus est in Series quinque, quarum haec ultima ad observandas illas stellas variabiles iuvat, quae nudis oculis conspicuae manent. E reliquis tamen Seriebus huic insertae sunt stellae perpaucae, quarum magna mutationis pars nudis oculis vel instrumento manuali observanda est. Hae sunt χ Cygni (Ser. III), *o* Ceti (Ser. IV), R Hydrae (Ser. IV), R Carinae (Ser. IV), quibus adnumerari potest η Carinae. Aliae autem stellae, quarum lux minima est infra magnitudinem septimam, huic Seriei propriae non sunt, quamquam earum viginti sex suis locis indicantur, quia dum maxime lucent, his Chartis cognosci et observari possunt.

Unde satis apparet hanc Seriem non tam ex observationibus nostris quam ex aliorum libris esse compositam. Quare totum fere laborem iis, qui mihi assistebant: PP. I. Hisgen, G. Zwack, I. T. Hedrick, committere potui. Delineatas autem Chartas cum caelo, quantum in his regionibus conspici potest, diligentissime comparavi, stellasque tenuiores, si quae ad observandam lucem minimam et ad solvendas ambiguitates videbantur utiles, inserendas curavi. Chartas circa polum australem sitas, quae sunt quattuor ultimae huius Seriei, P. Edmundus Goetz S. I., postquam eas in nostra specula delineavit sedemque suam anno 1903 in civitate Bulawayo, Rhodesia, fixit, eodem modo eademque cura cum caelo comparavit.

Iam quo facilius intellegatur, qua ratione hic Catalogus sit compositus et stellae descriptae in Chartis, haec videntur explicanda.

Chartarum inscriptiones numeros et litteras stellarum variabilium continent et variationes a maxima usque ad minimam lucem mediis numeris indicant.

Fines regionum describendarum eo consilio electi sunt, ut singulae Chartae ad variabiles certo inveniendas solae sufficerent. Quo factum est, ut Chartae, cum aliae aliis maiorem vel minorem caeli partem repraesentarent, et scala proiectionis et numero variabilium inter se discreparent. Proicientis sphaerae diversos radios et uniuscuiusque Chartae coordinatas centri in tabula I. huic praefationi addita invenies.

Regio circa eas variabiles, quae ad debiliorem lucem descendunt, sicut in ceteris Seriebus stellis densior est quam pars Chartae reliqua. His regionibus exceptis Chartae non continent nisi stellas usque ad magnitudinem quintam. Imagines autem variabilium eodem modo atque in ceteris Seriebus duobus circulis designantur, quorum exterior lucem maximam, minimam interior indicat.

Nunc Catalogum explicemus. Hic a reliquis Seriebus differt et inscriptionibus foliorum et columnis, quibus nomina, collocationes, magnitudines stellarum eduntur.

Inscriptionum enim numeros quidem et litteras, quibus stellae variabiles designantur, et formulas, quibus leges variationum lucis definiuntur, ex III. catalogo D. Chandler transcripsimus; earum autem stellarum, quae ad typum „Algol“ pertinent, variatio longitudine tantum periodi indicatur, quia tempus lucis minimae, cum sit brevissimum, certius ex ephemeride speciali, quam ex computatione colligitur.

Nominantur autem stellae, ut moris est, non solum constellationibus, in quibus separandis clarissimos viros Argelander, Heis, Gould secuti sumus, sed etiam litteris Bayeri et numeris Flamsteedii vel Uranometriae Argentinae. Quae stella aliis constellationibus ab aliis tribuatur, notis docetur. Sequuntur numeri ex catalogis Bonnae (BD.) et Cordubae (CD.) confectis (omnes infra declinationem -23^0 ad hunc referuntur, ad illum ceteri), vel ex catalogo qui a D. Pickering Southern Meridian Photometry inscribitur et Tabulis VII et XIII tomi XXXIV Annalium H. C. O. constat (numeri uncis inclusi in sola Tab. VII. inveniuntur).

Loca stellarum ordinavimus, quantum per constellationes fieri potuit, secundum Ascensiones Rectas. Plurima ex optimis catalogis, ut „Berliner Astr. Jahrbuch", „Catalog der astronomischen Gesellschaft", „Catálogo General de Córdoba", pauca ex BD. vel CD. desumpsimus, omnia ad annum 1900.0 reduximus.

Magnitudines stellarum, quippe quae a viris peritissimis determinatae iam sint, ex tribus catalogis, qui nobis videbantur optimi, transtulimus. Qui sunt DD. Müller et Kempf Photometrische Durchmusterung, Harvard Photometry (H. C. O. t. XXXIV, XLIV, XLV), Uranometria Argentina, designantur PD., HP., UA. Litteris PD. in quattuor ultimis foliis huius catalogi substituuntur LM., quibus magnitudines a Dr. Roberts (Lovedale, Cape Colony) determinatae indicantur.*) Aliorum magnitudines earumque comparatio critica, in catalogis PD. et HP. inveniuntur. Partes horum operum in lucem nondum editas ab auctoribus esse nobis transmissas grato animo profitemur.

Iam postremae columnae Notis variationes lucis stellarum variabilium ex catalogo III. D. Chandler depromptae, discrepantes stellarum designationes, numeri cumulorum nebularumque ex aliis catalogis petiti, colores, alia indicantur. Ii numeri, qui proxime sequuntur litteras Kr., referuntur ad opus D. Fr. Krueger, cui titulus: „Catalog der farbigen Sterne" vel, si uncis includuntur, ad eius Supplementum; illi vero, qui has litteras praecedunt, significant colores stellarum ab eodem auctore mensuratos, non scala D. Chandler, ut in reliquis Seriebus, sed scala D. Schmidt. Omissi autem sunt numeri 4.0 minores, cum id unum nobis propositum esset, ne quis in luce stellarum variabilium comparanda stellis nimis coloratis sine speciali attentione uteretur. Neque ad id comparatione critica huius catalogi cum aliis, ut PD. vel D. Osthoff (A. N. 3658) opus erat. Satis est hoc loco commemorare scalas D. Osthoff et D. Krueger (praeter differentiam generalem $O - K = + 1^c.3$) cum D. Schmidt, scalam autem catalogi PD. fere cum D. Chandler congruere (V. J. S. XXXIV pag. 297).

Ultimis quattuor foliis insertae sunt adnotationes ex UA., hoc modo, ut stellae rubentes littera *r* designentur, ceteri colores littera *c*; quae plerumque adnotatiuncula subscripta explicantur.

Quibus stellis in metienda luce variabilium viri in hac arte versati usi sint, ex tabula numerorum ad calcem foliorum adiecta cognoscitur. Unde facile patet, quae stellae ad comparationem aptissimae sint. Tantorum virorum experientiam ut iis, qui huius rei minus periti sunt, integram servaremus, libros et scripta diligenti examini subiecimus; praeterea ad plurimos eorum, qui adhuc in vivis sunt, chartas photographia reproductas misimus, ut stellas a se observatas et comparatas indicarent. Inter quos imprimis DD. Pickering, Sawyer, Yendell amplam materiam suppeditarunt. Stellas comparandas circa polum australem D. Innes, Col. Markwick, Dr. Roberts, P. Goetz nobis indicaverunt.

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*) Qua via ac ratione usus esset, Dr. Roberts per epistulam nobis declaravit. Experimento facto hos tres magnitudinum limites definivit, ad quos ceteras magnitudines "graduum" mensurâ referret: magnitudinem $6^M.8$ tenuissimis stellis quae nudo oculo vix cernuntur, magnitudines $9^M.2$ et $11^M.4$ iis stellis assignavit, quas cernere vix potuit instrumentis duobus, minore altero ("1 inch"), altero maiore ("Ross 3¼ inch"). Graduum "sequentias", quas vocant, inter binos limites viis contrariis, modo a limite superiore, modo ab inferiore profectus ordinavit. Ut omittam alios modos, quibus errores praecavere studuit, aliquotiens, imprimis ad observandas stellas magnitudine 6.8 lucidiores, cuneo photometrico usus est.

Quibus viris iisque omnibus, qui huic operi vel componendo vel typis edendo auxilium praebuere, gratissimi animi sensum exprimere liceat. Quae gratiae imprimis debentur Clarissimae Dominae, cuius nomen et in folio titulari apparet et apud omnes, qui stellarum studio incumbunt, in honore manebit; debentur D. Eduardo C. Pickering, cuius illa commendationibus inducta huic editioni subsidia praebuit; debentur etiam librario, qui, his subsidiis minime in securo collocatus, tamen in hoc Atlante ad pulchritudinis normam imprimendo neque labori pepercit neque periculo.

De instrumento ad hanc seriem V. aptissimo haec animadvertenda sunt. Distributio stellarum variabilium in tres classes principales eo consilio facta est, ut singulis generibus apparatuum, quibus commode observari possent, singulae responderent. Primam enim classem stellas variabiles tenuissimas continere et instrumenta maiora desiderare ex Seriebus I, II, III iam in lucem editis notum est. Classis autem altera, quae titulo Seriei IV. mox evulgabitur, et limitibus magnitudinum stellarum et instrumentis ad observandum adhibendis—minores enim tubi parallactici requiruntur—Catalogis Bonnensibus BD. respondet. Tandem haec V. Series tertiam classem comprehendit easque stellas variabiles exhibet, quae sive nudis oculis sive instrumentis minimis, quae manibus tenentur, conspicuae sunt.

In conficienda hac Serie instrumentum proprium et idoneum desiderabatur. Ex iis enim, quae communiter in spectaculis vel itineribus adhibentur, vix ullum nostro proposito conducere usu creberrimo compertum est. Tandem ex Annalibus Moscoviensibus (vol. IV, 1902, pag. 121) cognovimus instrumentum quoddam a clarissimis fratribus Steinheil constructum esse, quod huic rei conveniens suspicabamur. Hos igitur viros rogavimus, ut apparatum similem et huic operi accommodatum examini nostro committerent. Quod quidem libenter fecerunt.

Instrumentum nobis transmissum, quod ex duobus tubis constat, praeter motum communem, quo obiectum oculis subiciatur, admittit peculiarem, quo oculorum inter se distantiae consulatur. Insuper ut iis serviatur, quorum oculi distantia focali inter se discrepant, alterum obiectivum protrahi potest. Vitrum obiectivum aperturam habet 34 mm. et angulum visionis $7\,{}^{1}/_{2}{}^{0}$ subtendit. Imago offertur inversa, diameter 5^{ies}, lucis intensitas 49^{ies} augetur.

Cum hoc instrumento alia binocularia, quorum in comparandis cum caelo Chartis magnum numerum examinavimus, nullo modo conferri posse cognovimus; quare illud huic Seriei sine exemplo aptissimum esse profiteri non dubitamus.

Faxit Deus, quo magis in dies caeli enarrent gloriam suam, ut hoc Atlante via paretur ad stellarum variabilium arcana altius investiganda, plenius intellegenda.

Ex Collegio Georgiopolitano, die 8. Decembris,
anno MCMV.

I. G. Hagen, S. I.

Tabula I.

Numerus Chartae	Centrum Chartae		Radius Sphaerae
I	1^h 10^m	$+45^0$ $0'$	290 mm
II	1 30	0 0	165
III	2 40	+40 0	200
IV	4 20	+20 0	300
V	4 25	+40 0	265
VI	6 0	+20 0	165
VII	7 0	−20 0	520
VIII	11 40	0 0	160
IX	15 5	−10 0	650
X	16 45	+30 0	220
XI	17 20	0 0	305
XII	18 0	−25 0	395
XIII	18 30	+37 30	455
XIV	19 10	+ 5 0	290
XV	20 30	+40 0	315
XVI	22 30	+60 0	225
XVII	22 50	+20 0	270
XVIII	7 40	−50 0	370
XIX	10 20	−60 0	400
XX	14 0	−70 0	290
XXI	18 0	−60 0	240

Tabula II.

Auctores stellarum comparationis.

Argelander	A	Oudemans	O
Baxendell	B	Plassmann	P
Backhouse	Be	Plummer	Pr
Birt	Bt	Schönfeld	S
Chandler	C	Schwab	Sb
Espin	E	Safarik	Sk
Gore	G	Sawyer	Sr
Heis	H	Schmidt	St
Harvard College Obs. .	Hd	Winnecke	W
Hisgen	Hn	Wilsing	Wg
Krueger Ad.	K	Yendell	Y
Lindemann	L	Zaiser	Z
Markwick	M	Uranometria Argentina .	UA

Addenda et Corrigenda

in Tabulis Stellarum Comparandarum.

Charta	Titulus	Littera	
I	α Cassiopeiae	H	Adde: 10
II	o Ceti	K	Adde: 52, 55, 59, 73
II	o Ceti	H	Adde: 40; dele: 34, 41
III	β Persei	K	Adde: 20, 23, 26, 32, 37, 38
IV	λ Tauri	H	Adde: 1
VI	α Orionis	Z	Dele: 101
VI	ζ Geminorum	H	Dele: 63, 66
VIII	*R* Hydrae	A	Adde: 25, 27, 67, 68, et 32; 66, 348B, PXIII 86
VIII	*R* Hydrae	H	Adde: 72, dele: 42
IX	δ Librae	Z	Adde: BD. — 1° 2991
XII	X Sagittarii	M	Adde: 2, 6, 7 et 8
XII	W Sagittarii	M	Adde: 24
XIV	*R* Scuti	H	Adde: 18, 21 et 17
XVI	μ Cephei	H	Dele: 39

XIV Num. 7 = 74 Ophiuchi, sub PD., pro 5.0 lege 4.8.

Addendum ad Catalogum Chartae VI.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
23²	Auriga	RT	48	+30° 1238	$6^h 22^m.1$	+30° 33′	variabilis			5^M–$5^M.6$, Heis 110.

Addenda ad Catalogum Chartae XVI.

5²	Cassiopeia			+63° 99	$0^h 44^m.7$	+63° 42′	5.6	5.6		
6²				+65 115	0 52.2	+65 49	6.1	(6.0)		
6³				+63 149	1 5.0	+63 40	5.8	5.6		
6⁴		RU	32	+64 127	1 5.2	+64 29	variabilis			$5^M.8$–$6^M.2$

Stellae comparandae:

RU 32 Cassiopeiae	Barr	5² 6² 6³
	Yendell	5² 6² 6³

Atlas Stellarum Variabilium.

Index Chartarum quae in Serie V. continentur.

Die Verlagshandlung liefert diesen vorläufigen Index zur leichteren Orientierung und beabsichtigt denselben später durch einen Appendix zu ersetzen, wenn die IV. Serie erschienen sein wird.

For the convenience of subscribers this Index is provisionally supplied by the publisher. It will be superseded by an Appendix when the IV. Series leaves the press.

Cet Index est inséré provisoirement pour la convenance des abonnés: il sera remplacé par un Appendice quand la IV. Série sortira de la presse.

Num.	Nomen Stellae	Charta	Num.	Nomen Stellae	Charta	Num.	Nomen Stellae	Charta
100	T Ceti	II	3418	R Carinae	XIX	6613	d Serpentis	XIV
209	α Cassiopeiae	I	3495	l Carinae	XIX	6733	R Scuti	XIV
391	32 Cassiopeiae	XVI	3796	U Hydrae	VIII	6758	β Lyrae	XIII
806	o Ceti	II	3847	η Carinae	XIX	6760	κ Pavonis	XXI
1072	ϱ Persei	III	4826	R Hydrae	VIII	6794	R Lyrae	XIII
1090	β Persei	III	5013	ϑ Apodis	XX	6984	U Aquilae	XIV
1411	λ Tauri	IV	5319	R Apodis	XX	7120	χ Cygni	XV
1768	ε Aurigae	V	5374	δ Librae	IX	7124	η Aquilae	XIV
1800	W Orionis	VI	5758	X Herculis	X	7149	S Sagittae	XIV
2098	α Orionis	VI	5912	g Herculis	X	7437	X Cygni	XV
2213	η Geminorum	VI	6181	α Herculis	X	7483	T Vulpeculae	XV
2279	T Monocerotis	VI	6189	U Ophiuchi	XI	7754	W Cygni	XV
2509	ζ Geminorum	VI	6202	u Herculis	X	7803	μ Cephei	XVI
2583	L² Puppis	XVIII	6368	X Sagittarii	XII	8073	δ Cephei	XVI
2610	R Canis Maioris	VII	6404	Y Ophiuchi	XI	8273	β Pegasi	XVII
2852	V Puppis	XVIII	6472	W Sagittarii	XII			
3409	N Velorum	XIX	6573	Y Sagittarii	XII			

Charta I.

209 α Cassiopeiae; Variatio irregularis.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Cassiopeia	β	11	+58° 3	0^{h} $3^{m}.8$	+58° 36′	2.6	2.4		
2		λ	14	+53 82	0 26.2	+53 58	4.9	4.9		
3				+53 102	0 30.6	+53 37	5.3	5.2		
4		ζ	17	+53 105	0 31.4	+53 21	4.1	3.8		
5		α	18	+55 139	0 34.8	+55 59	variabilis			$2^{M}.2-2^{M}.8$; $4^{c}.8$ Kr. 52.
6		η	24	+57 150	0 43.0	+57 17	3.8	3.6		
7		γ	27	+59 144	0 50.7	+60 11	2.5	2.2		
8		μ	30	+54 223	1 1.5	+54 26	5.3	5.2		
9		ϑ	33	+54 236	1 5.0	+54 37	4.6	4.6		
10		δ	37	+59 248	1 19.3	+59 43	3.0	2.8		
11		ε	45	+62 320	1 47.2	+63 11	3.6	3.4		
12	Andromeda	α	21	+28 4	0 3.2	+28 32	2.4	2.1		≡ δ Pegasi.
13		ϑ	24	+37 34	0 11.9	+38 8	4.7	4.6		
14		σ	25	+35 44	0 13.1	+36 14	4.7	4.4		
15		π	29	+32 101	0 31.5	+33 10	4.5	4.5		
16		δ	31	+30 91	0 34.0	+30 19	3.5	3.4		$4^{c}.0$ Kr. 51.
17			33	+40 148	0 37.3	+40 43				neb. Messier 31 et 32.
18		ν	35	+40 171	0 44.3	+40 32	4.8	4.4		
19		μ	37	+37 175	0 51.2	+37 57	4.1	4.0		
20		φ	42	+46 275	1 3.7	+46 43	4.5	4.4		
21		β	43	+34 198	1 4.1	+35 5	2.3	2.2		$5^{c}.5$ Kr. 91.
22		υ	50	+40 332	1 30.9	+40 54	4.3	4.1		
23		γ	57	+41 395	1 57.8	+41 51	2.4	2.3		$5^{c}.5$ Kr. 160.
24	Perseus	υ		+47 467	1 31.9	+48 7	3.8	3.8		51 Androm., Fl. et BAC.
25		φ		+49 444	1 37.4	+50 11	4.4	4.1		54 " "
26		ϑ	13	+48 746	2 37.4	+48 48	4.4	4.3		
27	Triangulum	α	2	+28 312	1 47.4	+29 6	3.7	3.6		
28		β	4	+34 381	2 3.6	+34 31	3.3	3.0		
29		δ	8	+33 395	2 10.9	+33 47	5.1	5.1		
30		γ	9	+33 397	2 11.4	+33 23	4.3	4.1		

Stellae comparandae:

α Cassiopeiae	A	1 7 10 . .
	Be	1 7 10 11 23
	Bt	1 7 . . .
	H	1 7 . . .
	L	1 7 10 . .
	O	1 7 . . .
	P	1 7 10 11 23 et 9 21
	Sr	1 7 10 . .
	St	1 7 10 11 . et α Cephei
	Wg	1 7 10 . .

Charta II.

100 T **Ceti;** Periodus irregularis.

806 *o* **Ceti;** Max.: 2 402 963^d.4 (27. Dec. 1866) + 331^d.6 E (Inaequ. period.).

Num.	Constellatio	Bay.	Fl.	B & CD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	**Cetus**		2	-18^0 6417	$23^h 58^m.6$	$-17^0 53'$		4.5	4.3	
2				−17 6868	23 59.2	−17 5		5.8	5.9	
3				−18 6428	0 2.2	−17 57		6.1	6.3	$5^c.8$ Kr. 3.
4				−18 3	0 3.5	−18 8		6.3	6.2	$5^c.9$ Kr. 5.
5			6	−16 17	0 6.2	−16 1		5.1	5.1	
6				−18 14	0 7.1	−18 29		5.6	5.4	$5^c.4$ Kr. 14.
7				−21 17	0 9.3	−21 45		6.9	7.0	
8			7	−19 21	0 9.6	−19 29		4.8	4.3	$6^c.9$ Kr. 21.
9				−21 24	0 11.6	−20 46		6.4	6.5	
10				−19 30	0 12.5	−19 36		6.5	6.6	
11				−21 31	0 13.2	−21 42		6.7	6.6	
12		ι	8	− 9 48	0 14.3	− 9 23		3.9	3.5	
13		T		−20 50	0 16.7	−20 37		variabilis		$6^M.4-7^M.0$; $6^c.5$ Kr. 33.
14				−20 67	0 22.6	−20 41		6.8	6.8	
15				−21 57	0 23.4	−20 53		6.4	6.4	
16				−24 179	0 25.4	−24 21		5.2	5.2	
17				−25 225	0 32.1	−25 19		5.7	5.8	
18		β	16	−18 115	0 38.6	−18 32		2.4	2.3	$4^c.7$ Kr. 55.
19		φ¹	17	−11 128	0 39.2	−11 9		4.9	5.1	
20				−22 127	0 39.8	−22 33		5.3	5.3	
21				−23 293	0 41.2	−23 4		5.6	5.8	
22				−22 134	0 43.1	−22 16		5.3	5.8	
23		φ²	19	−11 153	0 45.1	−11 11		5.2	5.5	
24			20	− 1 114	0 47.9	− 1 41		4.9	5.2	$7^c.0$ Kr. 66.
25		η	31	−10 240	1 3.6	−10 43		3.6	3.5	$4^c.2$ Kr. 90.
26		ϑ	45	− 8 244	1 19.0	− 8 42		3.9	3.2	
27			46	−15 266	1 20.7	−15 7		5.0	5.1	$5^c.8$ Kr. 117.
28			48	−22 254	1 24.8	−22 9		5.1	5.3	
29				− 4 260	1 37.7	− 4 12		5.1	5.2	
30		τ	52	−16 295	1 39.4	−16 28		3.7	3.4	
31		χ	53	−11 352	1 44.7	−11 11		4.7	4.8	
32		ζ	55	−11 359	1 46.5	−10 50		3.9	3.5	
33		υ	59	−21 358	1 55.3	−21 34		4.3	3.9	$6^c.7$ Kr. 154.
34			60	− 0 307	1 58.1	− 0 21		5.5	5.4	
35			63	− 2 375	2 6.5	− 2 18		6.0	6.0	
36			66	− 3 336	2 7.7	− 2 52		5.6	5.8	
37		ξ¹	65	+ 8 345	2 7.7	+ 8 23	4.7	4.6	4.3	
38			67	− 7 393	2 12.0	− 6 53		5.7	5.7	
39		*o*	68	− 3 353	2 14.3	− 3 26		variabilis*		$\left.\begin{matrix}1^M.7\\5.0\end{matrix}\right\}-\left\{\begin{matrix}8^M\\9.5\end{matrix}\right.$; $5^c.0-8^c.0$ Kr. 186.
40				− 5 438	2 14.7	− 4 48		6.5	6.8	

* Vide etiam Seriem IV.

Num.	Constellatio	Bay.	Fl.	B & CD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
41	Cetus		69	− 0° 355	$2^h\ 16^m.8$	− 0° 4′		5.5	5.8	$6^c.8$ Kr. 193.
42			70	− 1 322	2 17.1	− 1 20		5.6	5.9	
43			71	− 3 374	2 19.9	− 3 14		6.3	6.5	
44		ρ	72	−12 451	2 21.1	−12 44		4.9	4.6	
45		ξ^2	73	+ 7 388	2 22.8	+ 8 1	4.5	4.3	4.4	
46				− 0 378	2 25.6	− 0 11		5.9	6.5	
47				+ 1 438	2 26.3	+ 1 49	5.4	5.4	5.7	
48			75	− 1 353	2 27.1	− 1 29		5.5	5.9	*
49		σ	76	−15 449	2 27.3	−15 41		4.8	4.8	
50		U		−13 479	2 28.9	−13 35		variabilis		Ser. IV. $7^M - 12^M$.
51		ν	78	+ 4 418	2 30.6	+ 5 9	5.1	4.9	5.1	$4^c.0$ Kr. 207.
52		δ	82	− 0 406	2 34.4	− 0 6		4.1	4.0	
53		ε	83	−12 501	2 34.7	−12 18		5.1	4.6	
54			84	− 1 377	2 36.1	− 1 7		5.8	6.2	
55		γ	86	+ 2 422	2 38.1	+ 2 49	3.8	3.4	3.2	
56		π	89	−14 519	2 39.4	−14 17		4.4	4.1	
57		μ	87	+ 9 359	2 39.5	+ 9 42	4.4	4.3	4.3	
58		λ	91	+ 8 455	2 54.4	+ 8 31	5.0	4.7	4.8	magn. fundament.
59		α	92	+ 3 419	2 57.1	+ 3 42	2.9	2.8	2.4	$6^c.8$ Kr. 250.
60			94	− 1 457	3 7.7	− 1 34		5.1	5.3	
61		κ	96	+ 2 518	3 14.1	+ 3 0	5.2	5.0	5.1	
62	Pisces	ω	28	+ 6 5227	23 54.2	+ 6 19	4.3	4.0	4.0	
63		δ	63	+ 6 107	0 43.5	+ 7 2	4.7	4.5	4.4	$4^c.9$ Kr. 61.
64		ε	71	+ 7 153	0 57.8	+ 7 21	4.7	4.5	4.2	
65		χ	84	+20 172	1 6.1	+20 30	4.7	4.9		$4^c.4$ Kr. 93.
66		ζ	86	+ 6 {174 175	1 8.5	+ 7 {3 2	5.5 6.6	5.4	4.8	
67		f	89	+ 2 185	1 12.6	+ 3 5	5.6	5.4	5.2	
68		μ	98	+ 5 194	1 24.9	+ 5 38	5.1	5.0	5.0	
69		η	99	+14 231	1 26.1	+14 50	4.1	3.8		
70		ν	106	+ 4 293	1 36.2	+ 4 59	4.7	4.5	4.5	≡ 51 Ceti.
71		ο	110	+ 8 273	1 40.1	+ 8 39	4.6	4.5	4.3	
72		ξ	111	+ 2 290	1 48.4	+ 2 42	4.9	4.8	4.7	
73		α	113	+ 2 317	1 56.9	+ 2 17	4.1	3.8	3.8	
74	Pegasus	ψ	84	+24 4865	23 52.7	+24 35	4.8	4.7		$6^c.8$ Kr. 2139.
75		γ	88	+14 14	0 8.1	+14 38	3.3	2.8		
76	Andromeda	α	21	+28 4	0 3.2	+28 32	2.4	2.1		≡ δ Pegasi.
77		ζ	34	+23 106	0 42.0	+23 43	4.4	4.2		$4^c.7$ Kr. 59.
78	Aries	γ	5	+18 243	1 48.0	+18 48	4.2	3.9	3.8	
79		β	6	+20 306	1 49.1	+20 19	3.0	2.8	2.7	
80		α	13	+22 306	2 1.5	+22 59	2.2	2.2		
81		ε	48	+20 484	2 53.5	+20 56	4.8	4.7	5.0	
82		δ	57	+19 477	3 5.9	+19 21	4.7	4.6		
83	Eridanus	τ^1	1	−19 518	2 40.4	−19 0		4.7	4.5	= 90 Ceti.
84		η	3	− 9 553	2 51.5	− 9 18		4.0	3.7	
85		τ^3	11	−24 1387	2 58.0	−24 1		4.1	4.1	
86		ζ	13	− 9 624	3 11.0	− 9 11		4.8	4.9	
87		τ^4	16	−22 584	3 15.1	−22 7		4.0	3.4	

* u Ceti in Bode „Uranographia“ et Oudemans „Beobachtungen“.

Num.	Constellatio	Bay.	Fl.	B & CD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
88	**Eridanus**		17	− 5° 674	$3^h 25^m.7$	− 5° 25′		4.7	4.7	UA: *υ* Erid.
89		*ε*	18	− 9 697	3 28.2	− 9 48		3.8	3.6	
90	**Taurus**	*o*	1	+ 8 511	3 19.4	+ 8 41	3.9	3.8	3.4	− Kr. 279.
91		*ξ*	2	+ 9 439	3 21.7	+ 9 23	4.0	3.8	3.5	
92			10	− 0 572	3 31.8	+ 0 5		4.4	4.5	

Stellae comparandae:

T Ceti	C	3	5	6	9	10	.	et 4
	Sr	3	5	6	9	.	11	et 2 7
	Y	.	.	6	9	10	11	et 8

o Ceti	A	18	.	.	35	.	37	.	41	42	43	45	.	48	51	52	55	57	58	59	.	73	79	80	.	et 75
	Be	.	.	34	35	36	.	.	41	42	43	45	.	48	51	52	55	.	.	59	72	73	.	.	84	et 12 32 38 47 67 68
	H	.	.	34	35	.	37	.	41	42	43	45	46	48	51	52	55	57	58	59	.	73	79	.	.	et 54
	Hd	18	.	.	.	.	37	40	41	42	43	45	46	48	51	52	55	57	58	59	.	73	79	80	.	
	Hn	.	.	.	.	.	.	.	.	42	.	.	.	.	51	52	55	.	.	59	72	73	.	.	.	
	O	18	25	.	.	.	37	.	.	.	43	.	.	48	.	52	55	.	.	59	.	73	.	.	84	et 26 71
	P	.	25	.	35	36	37	40	41	42	43	45	.	48	51	52	.	.	.	59	72	73	.	.	.	
	S	.	.	.	.	.	.	40	.	.	.	45	.	.	51	52	55	57	58	59	.	73	79	.	.	
	Sb	.	.	.	.	.	.	40	.	42	.	45	.	.	51	52	55	.	.	59	.	.	.	.	.	
	Sr	.	.	.	35	.	37	.	41	42	.	45	.	.	51	52	55	57	58	59	.	.	.	.	.	
	St	.	.	.	.	.	.	.	.	.	.	.	.	.	.	52	55	.	.	59	.	73	.	.	.	
	W	.	.	.	35	.	37	.	.	.	43	45	.	48	51	52	55	.	.	59	.	73	.	.	.	et 76
	Y	.	.	.	35	.	37	.	.	.	.	45	.	.	51	52	.	57	.	59	.	.	.	.	.	

A praeterea adhibebat: *ι* et *β* Aurigae, *β* Tauri, *ε* Pegasi, *β* Ursae Mai.
Hd ,, ,, : *β* Aurigae, *α* Gemin., *α* et *β* Tauri
O ,, ,, : *β* Aurigae, *β* Tauri

Charta III.

1072 *ϱ* **Persei;** Periodus irregularis.

1090 *β* **Persei;** Algol, Periodus: $2^{d}\,20^{h}\,48^{m}\,55^{s}.425$ (Inaequ. period.).

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Cassiopeia	β	11	+58° 3	$0^{h}\ 3^{m}.8$	+58° 36′	2.6	2.4		
2		α	18	+55 139	0 34.8	+55 59	variabilis			$2^{M}.2-2^{M}.8$; $4^{c}.8$ Kr. 52.
3		η	24	+57 150	0 43.0	+57 17	3.8	3.6		
4		γ	27	+59 144	0 50.7	+60 11	2.5	2.2		
5		ϑ	33	+54 236	1 5.0	+54 37	4.6	4.6		
6		δ	37	+59 248	1 19.3	+59 43	3.0	2.8		
7		ε	45	+62 320	1 47.2	+63 11	3.6	3.4		
8	Andromeda	φ	42	+46 275	1 3.7	+46 43	4.5	4.4		
9		β	43	+34 198	1 4.1	+35 5	2.3	2.2		$5^{c}.5$ Kr. 91.
10		υ	50	+40 332	1 30.9	+40 54	4.3	4.1		
11		γ	57	+41 395	1 57.8	+41 51	2.4	2.3		$5^{c}.5$ Kr. 160.
12	Perseus	υ		+47 467	1 31.9	+48 7	3.8	3.8		51 Androm., Fl. et BAC.
13		φ		+49 444	1 37.4	+50 11	4.4	4.1		54 ,, ,,
14		ϑ	13	+48 746	2 37.4	+48 48	4.4	4.3		
15		η	15	+55 714	2 43.4	+55 29	3.9	3.9		$6^{c}.4$ Kr. 229.
16			16	+37 646	2 44.2	+37 55	4.5	4.1		
17		τ	18	+52 641	2 47.2	+52 21	4.2	4.1		
18		π	22	+39 681	2 52.4	+39 16	4.9	4.5		
19		γ	23	+52 654	2 57.5	+53 7	3.2	3.0		
20		ϱ	25	+38 630	2 58.8	+38 27	variabilis			$3^{M}.4-4^{M}.2$; $6^{c}.0$ Kr. 252.
21		β	26	+40 673	3 1.7	+40 34	variabilis			$2^{M}.3-3^{M}.5$.
22		ι		+49 857	3 1.8	+49 14	4.2	4.2		
23		ϰ	27	+44 631	3 2.7	+44 29	4.0	4.1		
24		ω	28	+39 724	3 4.8	+39 14	4.7	4.9		$6^{c}.2$ Kr. 263.
25		α	33	+49 917	3 17.2	+49 30	2.2	1.9		
26		δ	39	+47 876	3 35.8	+47 28	3.3	3.1		
27		ο	38	+31 642	3 38.0	+31 58	3.9	3.9		
28		ν	41	+42 815	3 38.4	+42 16	4.0	3.9		
29				+30 582	3 45.8	+30 53	6.5	6.1		magn. fundament.
30		ζ	44	+31 666	3 47.8	+31 35	3.1	2.9		
31		X		+30 591	3 49.1	+30 46	variabilis			*
32		ε	45	+39 895	3 51.1	+39 43	3.2	2.9		
33		ξ	46	+35 775	3 52.5	+35 30	4.3	4.1		
34		λ	47	+49 1101	3 59.1	+50 5	4.5	4.2		
35		c	48	+47 939	4 1.4	+47 27	4.4	3.9		
36		μ	51	+48 1063	4 7.6	+48 9	4.3	4.3		

* X Persei esse variabilem vide AN. 3491 et 3577 necnon AJ. 434 et 462; periodus fere $7^{2}/_{3}$ annorum; variatio $6^{1}/_{2}{}^{M}-7^{1}/_{2}{}^{M}$?

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	δ	PD.	HP.	UA.	Notae
37	**Triangulum**	α	2	+28° 312	1h 47m.4	+29° 6′	3.7	3.6		
38		β	4	+34 381	2 3.6	+34 31	3.3	3.0		
39		δ	8	+33 395	2 10.9	+33 47	5.1	5.1		
40		γ	9	+33 397	2 11.4	+33 23	4.3	4.1		
41	**Aries**	γ	5	+18 243	1 48.0	+18 48	4.2	3.9	3.8	
42		β	6	+20 306	1 49.1	+20 19	3.0	2.8	2.7	
43		α	13	+22 306	2 1.5	+22 59	2.2	2.2		
44			41	+26 471	2 44.1	+26 51	3.7	3.6		
45		ε	48	+20 484	2 53.5	+20 56	4.8	4.7	5.0	
46		δ	57	+19 477	3 5.9	+19 21	4.7	4.6		
47	**Taurus**		17	+23 507	3 38.9	+23 48	4.1	3.8		
48		q	19	+24 547	3 39.3	+24 10	4.6	4.3		
49			20	+23 516	3 39.9	+24 4	4.2	4.1		
50			23	+23 522	3 40.4	+23 38	4.4	4.3		
51		η	25	+23 541	3 41.5	+23 48	3.1	3.0		
52			27	+23 557	3 43.2	+23 45	4.0	3.9		

Stellae comparandae:

ϱ Persei	G	. . . . . 28 30 32 . . .
	L	. . . 26 . 28 30 32 37 38 .
	O	. . 23 26 . 28 30 32 37 38 40 et 14
	P	16 18 23 26 27 28 30 32 37 38 40 et 19 22 33
	S	. . 23 26 27 28 . . 37 38 .
	Sr	. 18 23 . . . .
	St	16 . 23 26 27 28 . 32 . 38 .

β Persei	A	1 11 19 20 23 . 26 28 30 32 37 38 42 β et ε Aurigae, γ Pegasi
	Be	1 11 19 20 . . 26 . . 32 . 38 . et 4 6 12
	C	. . . 20 . . 26 . . . . 38 .
	H	. 11 . 20 23 . 26 . 30 32 37 . 42 ι Aurigae
	Hn	. 11 19 20 23 . 26 28 . . 37 38 42 43
	O	. 11 19 20 23 . 26 . 30 32 . 38 42 et 40
	P	. 11 19 20 23 25 26 28 . 32 37 . .
	S	. 11 19 20 . . 26 28 . 32 37 38 42
	Sr	. . . 20 . . 26 . . 32 37 38 .
	St	. . . 20 . 25 26 . 30 32 37 38 .
	W	. 11 19 20 23 25 26 . . 32 . 38 42
	Wg	. 11 . 20 . . 26 . . . 37 . .
	Y	. . . 20 . . 26 28 . 32 37 38 42

Charta IV.

1411 λ Tauri; Typus Algol, Periodus: $3^d\,22^h\,52^m.2$ (Inaequ. period.).

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Taurus	o	1	+ 8° 511	$3^h\,19^m.4$	+ 8° 41′	3.9	3.8	3.4	– Kr. 279.
2		ξ	2	+ 9 439	3 21.7	+ 9 23	4.0	3.8	3.5	
3		f	5	+12 486	3 25.4	+12 36	4.5	4.3	4.3	
4			17	+23 507	3 38.9	+23 48	4.1	3.8		
5		q	19	+24 547	3 39.3	+24 10	4.6	4.3		
6			20	+23 516	3 39.9	+24 4	4.2	4.1		
7		u	29	+ 5 539	3 40.4	+ 5 44	5.6	5.2	5.7	
8				+ 6 582	3 40.4	+ 6 53	7.5	7.2		
9			23	+23 522	3 40.4	+23 38	4.4	4.3		
10				+ 6 583	3 40.8	+ 6 30	6.1	6.1	6.4	
11		η	25	+23 541	3 41.5	+23 48	3.1	3.0		
12				+ 8 567	3 41.7	+ 8 39	7.3	7.4		
13		e	30	+10 486	3 42.8	+10 50	5.3	5.0	5.3	
14				+ 9 494	3 43.1	+ 9 20	7.0	7.0	6.8	
15			27	+23 557	3 43.2	+23 45	4.0	3.9		
16				+ 8 574	3 44.3	+ 9 6	7.1	6.8		
17				+12 516	3 45.7	+12 45	6.6	6.2	6.4	
18			31	+ 6 594	3 46.7	+ 6 14	6.1	5.7	5.9	
19		X		+ 7 560	3 47.8	+ 7 29		variabilis?		*
20				+ 8 596	3 49.4	+ 8 54	7.8	7.3		
21				+ 5 564	3 51.7	+ 5 45	6.4	6.0	6.4	
22		λ	35	+12 539	3 55.1	+12 12		variabilis		$3^M.4-4^M.2$.
23				+ 9 528	3 56.3	+ 9 43	6.0	5.6	5.9	
24		ν	38	+ 5 581	3 57.8	+ 5 43	4.2	3.9	3.9	
25				+ 7 592	3 58.5	+ 7 55	5.8	5.4	5.9	
26		μ	49	+ 8 657	4 10.1	+ 8 39	4.6	4.3	4.4	
27		γ	54	+15 612	4 14.1	+15 23	4.0	3.8		
28		δ	61	+17 712	4 17.2	+17 18	4.2	3.9		≡ δ′ H.
29		ε	74	+18 640	4 22.8	+18 58	3.9	3.7		
30		ϑ^1	77	+15 631	4 22.9	+15 44	4.0	4.2		
31		ϑ^2	78	+15 632	4 22.9	+15 39	3.8	3.6		
32		d	88	+ 9 607	4 30.1	+ 9 57	4.4	4.3	4.6	
33		α	87	+16 629	4 30.2	+16 18	1.2	1.1		– Kr. 376.
34		c	90	+12 618	4 32.6	+12 19	4.7	4.2	4.5	≡ c′ H.
35		τ	94	+22 739	4 36.2	+22 46	4.5	4.3		
36		β	112	+28 795	5 20.0	+28 31	2.0	1.7		≡ γ Aurigae.
37		ζ	123	+21 908	5 31.7	+21 5	3.3	3.0		
38	Perseus	o	38	+31 642	3 38.0	+31 58	3.9	3.9		
39		ζ	44	+31 666	3 47.8	+31 35	3.1	2.9		
40	Auriga	ι	3	+32 855	4 50.5	+33 0	2.9	3.0		– Kr. (34).

* UA. pag. 230, Taurus 22; Ch. III. $6\frac{1}{2}^M-8^M$.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
41	**Orion**	π^3	1	+6° 762	4ʰ 44ᵐ.4	+ 6° 47′	3.5	3.3	3.2	
42		π^2	2	+8 777	4 45.2	+ 8 44	4.7	4.3	4.7	
43		π^4	3	+5 745	4 45.9	+ 5 26	4.0	3.7	3.7	
44		π^5	8	+2 810	4 49.0	+ 2 17	4.0	3.7	3.7	
45		π^1	7	+9 683	4 49.4	+10 0	**4.9**	4.7	5.0	magn. fundament.
46		γ	24	+6 919	5 19.8	+ 6 16	2.1	1.6	1.7	
47		λ	39	+9 879	5 29.6	+ 9 52	3.7	3.5	3.5	

Stellae comparandae:

X Tauri	Hn	8 12 . 20
	Y	. . 16 20

λ Tauri	A	1 2 . 24 . 27 29 . . .
	B	1 2 . 24 . 27 . . . .
	Be	. . . 24 . . . . 41 43 44
	H	. . . . 26 27 29 39 . .
	O	1 2 . 24 . 27 29 . . .
	P	1 2 3 24 26 27 29 39 41 . et 37 40, α et γ Ceti
	Sk	1 2 3 . . . . . . 43 et 45
	W	. 2 . 24 26 27 . . . .
	Y	1 2 3 24 26 27 29 . . . et 32
	Z	1 2 3 . 26 27 . . . .

Charta V.

1768 ε Aurigae; Variatio irregularis.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Perseus	γ	23	+52° 654	$2^h 57^m.5$	+53° 7′	3.2	3.0		
2		ρ	25	+38 630	2 58.8	+38 27	variabilis			$3^M.4-4^M.2$; $6^c.0$ Kr. 252.
3		β	26	+40 673	3 1.7	+40 34	variabilis			$2^M.3-3^M.5$.
4		ι		+49 857	3 1.8	+49 14	4.2	4.2		
5		κ	27	+44 631	3 2.7	+44 29	4.0	4.1		
6		α	33	+49 917	3 17.2	+49 30	2.2	1.9		
7		δ	39	+47 876	3 35.8	+47 28	3.3	3.1		
8		ο	38	+31 642	3 38.0	+31 58	3.9	3.9		
9		ν	41	+42 815	3 38.4	+42 16	4.0	3.9		
10				+30 582	3 45.8	+30 53	6.5	6.1		magn. fundament.
11		ζ	44	+31 666	3 47.8	+31 35	3.1	2.9		
12		X		+30 591	3 49.1	+30 46	variabilis			*
13		ε	45	+39 895	3 51.1	+39 43	3.2	2.9		
14		ξ	46	+35 775	3 52.5	+35 30	4.3	4.1		
15		λ	47	+49 1101	3 59.1	+50 5	4.5	4.2		
16		c	48	+47 939	4 1.4	+47 27	4.4	3.9		
17		μ	51	+48 1063	4 7.6	+48 9	4.3	4.3		
18	Taurus		17	+23 507	3 38.9	+23 48	4.1	3.8		
19		q	19	+24 547	3 39.3	+24 10	4.6	4.3		
20			20	+23 516	3 39.9	+24 4	4.2	4.1		
21			23	+23 522	3 40.4	+23 38	4.4	4.3		
22		η	25	+23 541	3 41.5	+23 48	3.1	3.0		
23			27	+23 557	3 43.2	+23 45	4.0	3.9		
24		β	112	+28 795	5 20.0	+28 31	2.0	1.7		≡ γ Aurig.
25		ζ	123	+21 908	5 31.7	+21 5	3.3	3.0		
26	Auriga	ι	3	+32 855	4 50.5	+33 0	2.9	3.0		– Kr. (34).
27		ε	7	+43 1166	4 54.9	+43 41	variabilis			$3^M.0-4^M.5$.
28		ζ	8	+40 1142	4 55.5	+40 56	3.8	3.8		$4^c.5$ Kr. 427.
29		η	10	+41 1058	4 59.5	+41 6	3.4	3.3		
30		α	13	+45 1077	5 9.3	+45 54	0.5	0.2		
31		ν	32	+39 1429	5 44.6	+39 7	4.2	4.2		
32		δ	33	+54 970	5 51.3	+54 17	4.0	4.0		
33		β	34	+44 1328	5 52.2	+44 56	2.2	2.0		
34		ϑ	37	+37 1380	5 52.9	+37 12	2.9	2.7		

* X Persei periodo fere $7^2/_3$ annorum mutare lucem vide AN. nn. 3491, 3577 et AJ. nn. 434, 462; variatio $6^1/_2{}^M-7^1/_2{}^M$?

Stellae comparandae:

ε Aurigae	A	.	13	.	28	29	.	β Trianguli
	Be	7	13	26	.	29	.	et 1 5
	G	.	.	.	28	29	.	
	H	7	.	.	28	29	.	
	O	.	.	26	28	29	34	
	P	7	13	26	28	29	34	
	Sb	.	.	.	28	29	.	
	Sr	.	.	.	28	29	.	

Charta VI.

1800 W **Orionis;**

2098 α **Orionis;** Periodus irregularis.

2213 η **Geminorum;** Typus Algol, Periodus: $231^{d}.4$ (Inaequal. period.).

2279 T **Monocerotis;** Max.: 2 409 $633^{d}.63$ (1. April. 1885) + $27^{d}.0122$ E.

2509 ζ **Geminorum;** Max.: 2 410 $640^{d}.603$ (3. Ian. 1888) + $10^{d}.15382$ E.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	**Perseus**	ζ	44	+31° 666	$3^{h}\ 47^{m}.8$	+31° 35′	3.1	2.9		
2		ε	45	+39 895	3 51.1	+39 43	3.2	2.9		
3		ξ	46	+35 775	3 52.5	+35 30	4.3	4.1		
4	**Taurus**	γ	54	+15 612	4 14.1	+15 23	4.0	3.8		
5		δ	61	+17 712	4 17.2	+17 18	4.2	3.9		≡ δ′ H.
6		ε	74	+18 640	4 22.8	+18 58	3.9	3.7		
7		ϑ^1	77	+15 631	4 22.9	+15 44	4.0	4.2		
8		ϑ^2	78	+15 632	4 22.9	+15 39	3.8	3.6		
9		α	87	+16 629	4 30.2	+16 18	1.2	1.1		– Kr. 376.
10		β	112	+28 795	5 20.0	+28 31	2.0	1.7		≡ γ Aurigae.
11		ζ	123	+21 908	5 31.7	+21 5	3.3	3.0		
12	**Eridanus**	ν	48	– 3 834	4 31.3	– 3 33		4.0	3.8	
13		μ	57	– 3 876	4 40.5	– 3 26		4.0	4.0	
14		ω	61	– 5 1068	4 48.0	– 5 37		4.5	4.7	
15		β	67	– 5 1162	5 2.9	– 5 13		2.9	2.8	
16	**Auriga**	ι	3	+32 855	4 50.5	+33 0	2.9	3.0		– Kr. (34).
17		ε	7	+43 1166	4 54.9	+43 41	variabilis			$3^{M}.0$–$4^{M}.5$.
18		ζ	8	+40 1142	4 55.5	+40 56	3.8	3.8		$4^{c}.5$ Kr. 427.
19		η	10	+41 1058	4 59.5	+41 6	3.4	3.3		
20		α	13	+45 1077	5 9.3	+45 54	0.5	0.2		
21		ν	32	+39 1429	5 44.6	+39 7	4.2	4.2		
22		β	34	+44 1328	5 52.2	+44 56	2.2	2.0		
23		ϑ	37	+37 1380	5 52.9	+37 12	2.9	2.7		
24	**Orion**	π^3	1	+ 6 762	4 44.4	+ 6 47	3.5	3.3	3.2	
25		π^2	2	+ 8 777	4 45.2	+ 8 44	4.7	4.3	4.7	
26				+ 0 871	4 45.6	+ 0 59	7.0	6.7	6.9	
27		π^4	3	+ 5 745	4 45.9	+ 5 26	4.0	3.7	3.7	
28			5	+ 2 800	4 48.2	+ 2 21	5.5	5.7	6.0	
29				+ 1 847	4 48.8	+ 1 24	6.9	6.5	6.9	
30		π^5	8	+ 2 810	4 49.0	+ 2 17	4.0	3.7	3.7	
31				+ 1 857	4 50.8	+ 1 28	7.2	6.9		
32		π^6	10	+ 1 872	4 53.4	+ 1 34	4.6	4.8	4.7	– Kr. 420.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
33	**Orion**			+ 0° 923	$4^h\ 56^m.7$	+ 0° 35′	6.2	6.2	6.6	– Kr. 432.
34				+ 1 886	4 56.8	+ 1 28	6.8 / 8.0	6.2	6.5	
35		**W**		+ 0 939	5 0.2	+ 1 2	variabilis			6^M–7^M; $8^c.8$ Kr. 438.
36				+ 0 975	5 6.6	+ 0 55	6.1	6.1	6.3	
37		ϱ	17	+ 2 888	5 8.1	+ 2 45	4.7	4.7	5.1	
38				+ 1 938	5 8.3	+ 1 51	6.4	6.3	6.5	
39		β	19	− 8 1063	5 9.7	− 8 19		0.3	1.0	
40		o	22	− 0 929 / − 0 930	5 16.4 / 5 16.7	− 0 31 / − 0 29		5.5 / 4.6	6.7 / 5.1	
41		p	27	− 1 886	5 19.4	− 0 59		5.1	5.6	* $5^c.7$ Kr. 469.
42		η	28	− 2 1235	5 19.4	− 2 29		3.9	3.4	
43		γ	24	+ 6 919	5 19.8	+ 6 16	2.1	1.6	1.7	
44		δ	34	− 0 983	5 26.9	− 0 22		2.6	2.3	
45		λ	39	+ 9 879	5 29.6	+ 9 52	3.7	3.5	3.5	
46		ϑ^1	41	− 5 1315	5 30.4	− 5 27		4.6	5.0	
47		ϑ^2	43	− 5 1319	5 30.5	− 5 29		5.3	5.2	
48		ι	44	− 6 1241	5 30.5	− 5 59		2.8	2.9	
49		ε	46	− 1 969	5 31.1	− 1 16		1.7	1.8	
50		σ	48	− 2 1326	5 33.7	− 2 39		3.8	4.0	
51		ζ	50	− 2 1338	5 35.7	− 2 0		1.9	1.8	
52		χ^1	54	+20 1162	5 48.5	+20 16	4.7	4.6		
53		α	58	+ 7 1055	5 49.8	+ 7 23	variabilis			1^M–$1^M.4$; – Kr. 531.
54		μ	61	+ 9 1064	5 56.9	+ 9 39	4.4	4.1	4.7	magn. fundament.
55		χ^2	62	+20 1233	5 58.0	+20 8	4.8	4.8		
56		ν	67	+14 1152	6 1.9	+14 47	4.6	4.7	4.7	
57		ξ	70	+14 1187	6 6.3	+14 14	4.6	4.4	4.7	
58			73	+12 1081	6 10.1	+12 35	5.8	5.4		
59		k	74	+12 1084	6 10.8	+12 18	5.4	5.1		
60		l	75	+ 9 1173	6 11.6	+ 9 59	5.7	5.4	5.9	
61	**Gemini**		1	+23 1170	5 58.0	+23 16	4.4	4.4		
62		η	7	+22 1241	6 8.8	+22 32	variabilis			$3^M.2$–{$3^M.7$ / 4.2}; $6^c.0$ Kr. 563.
63		μ	13	+22 1304	6 16.9	+22 34	3.1	3.2		$6^c.5$ Kr. 580.
64		ν	18	+20 1441	6 23.0	+20 17	4.5	4.2		
65		γ	24	+16 1223	6 31.9	+16 29	2.3	1.9		
66		ε	27	+25 1406	6 37.8	+25 14	3.2	3.2		$5^c.7$ Kr. 627.
67			30	+13 1390	6 38.3	+13 20	4.6	4.6	5.2	
68		ξ	31	+13 1396	6 39.7	+13 0	3.6	3.5		
69		d	36	+21 1405	6 45.6	+21 53	5.6	5.3		
70		ϑ	34	+34 1481	6 46.2	+34 5	3.9	3.5		
71		e	38	+13 1462	6 49.0	+13 19	4.8	4.6		
72		ζ	43	+20 1687	6 58.2	+20 43	variabilis			$3^M.7$–$4^M.5$.
73		τ	46	+30 1439	7 4.8	+30 25	4.6	4.5		$4^c.3$ Kr. 680.
74		λ	54	+16 1443	7 12.3	+16 43	3.8	3.7		
75		δ	55	+22 1645	7 14.2	+22 10	3.7	3.5		
76		ι	60	+28 1385	7 19.5	+28 0	4.0	3.9		$5^c.0$ Kr. 702.
77		α	66	+32 1581	7 28.2	+32 6	2.0	1.6		
78		υ	69	+27 1424	7 29.8	+27 7	4.3	4.3		$5^c.8$ Kr. 722.
79		ϰ	77	+24 1759	7 38.4	+24 38	3.7	3.8		
80		β	78	+28 1463	7 39.2	+28 16	1.5	1.3		$4^c.0$ Kr. 745.

* BD. —1°882: $-0^m.6$; +1′; $7^M.2$.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	δ	PD.	HP.	UA.	Notae
81	**Monoceros**			+ 6° 1172	$6^h\ 10^m.3$	+ 6° 6′	6.4	5.9	6.5	UA: Orionis.
82				+ 7 1216	6 11.6	+ 7 6	6.8	6.4	6.8	„ „
83				+ 5 1168	6 11.9	+ 5 8	6.0	5.8	6.2	„ „
84			8	+ 4 1236	6 18.5	+ 4 39	4.6	4.2	4.8	„ ε Monoc.
85				+ 8 1316	6 18.6	+ 8 56	6.5	6.2	6.6	
86		T		+ 7 1273	6 19.8	+ 7 8		variabilis		$\left.\begin{matrix}5^M.8\\6.4\end{matrix}\right\}=\left\{\begin{matrix}7^M.4\\8.2\end{matrix}\right.$
87					6 20.1	+11 16				cum. NGC. 2224.
88				$+7\left\{\begin{matrix}1312\\1314\end{matrix}\right.$	6 24.5	$+7\left\{\begin{matrix}12\\11\end{matrix}\right.$		8.1		BD. $\left\{\begin{matrix}8^M.5\\8.2\end{matrix}\right.$
89				+ 8 1367	6 24.6	+ 7 59		6.8		BD. $7^M.8$.
90				+11 1209	6 26.2	+11 37	5.4	5.3		
91					6 26.3	+ 5 1				cum. NGC. 2239.
92			13	+ 7 1337	6 27.5	+ 7 24	4.7	4.4	5.0	
93			14	+ 7 1357	6 29.4	+ 7 39	6.7	6.4	6.9	
94		S	15	+10 1220	6 35.5	+ 9 59		variabilis?		($4^M.9-5^M.4$).
95			16	+ 8 1486	6 41.1	+ 8 42	6.2	5.9	6.5	
96			17	+ 8 1496	6 41.9	+ 8 9	4.8	4.9	5.3	$5^c.5$ Kr. 631.
97			22	− 0 1636	7 6.8	− 0 20		4.2	4.6	UA: δ Monoc.
98	**Canis Minor**	ε	2	+ 9 1643	7 20.2	+ 9 29	5.0	5.1	5.6	
99		β	3	+ 8 1774	7 21.7	+ 8 29	3.2	3.1	3.0	
100		γ	4	+ 9 1660	7 22.7	+ 9 8	4.3	4.6	5.1	A: Fl. 5.
101		α	10	+ 5 1739	7 34.1	+ 5 29	0.8	0.5	1.2	

Stellae comparandae:

W Orionis .	Hn	28 . . 32 33 34 36
	Sr	. 29 31 32 . . 36
	Y	. . . . 33 34 .

α Orionis . .	A	9 20 39 . 80 101 et Saturnus
	Be	9 20 39 43 80 101 et 10 77, α Bootis, α Canis Mai., α Lyrae
	H	9 20 39 . 80 101
	L	9 20 . . 80 101
	O	9 20 39 . 80 101
	Sb	9 . 39 . . 101
	St	9 . . . . .
	Z	9 . 39 43 . 101

η Geminorum	Be	63 . 66 68 70 74 75 79
	G	63 . . . . .
	P	63 64 66 . 70 . et 23 61
	S	. 64 66 . 70 .
	Sb	63 64 66 . 70 74
	Sr	63 64 66 68 . .
	St	63 64 66 . . .

T Monocerotis	Sr	81 82 83 85
	Y	81 82 83 .

S Monocerotis	P	54 64 68 71 84 90 92 95 .
	Sr	54 . . . 84 . . . .
	Y	. . . 71 . . 92 . 96

ζ Geminorum	A	.	64	.	68	74	75	76	78	.	
	Be	63	64	66	.	74	75	76	.	79	et 70 73
	H	63	64	66	68	74	75	76	78	79	
	O	.	64	.	.	74	75	76	78	.	
	P	63	64	66	68	74	75	.	.	79	et 61 71
	Sr	.	64	.	.	74	75	.	78	.	
	St	.	64	.	.	74	75	.	.	79	
	W	.	.	.	.	74	75	76	78	79	
	Y	.	64	.	.	74	75	76	78	.	
	Z	.	.	.	.	74	75	.	.	.	et 69

Charta VII.

2610 R Canis Maioris; Typus Algol, Periodus: $1^d 3^h 15^m 46^s.0$.

Num.	Constellatio	Bay.	Fl.	B & CD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	**Canis Maior**	ζ	1	−30° 3038	$6^h 16^m.5$	−30° 1′		3.0	3.2	
2		β	2	−17 1467	6 18.3	−17 54		2.0	2.2	
3		ξ^1	4	−23 3991	6 27.7	−23 21		4.4	4.5	
4		ξ^2	5	−22 1458	6 30.9	−22 53		4.5	4.8	
5		ν^2	7	−19 1502	6 32.3	−19 10		4.3	4.1	− Kr. 615.
6		ν^3	8	−18 1492	6 33.5	−18 9		4.7	4.9	− Kr. 618.
7				−14 1525	6 34.7	−14 3		5.0	5.3	− Kr. 621.
8		α	9	−16 1591	6 40.7	−16 35		−1.7	0.1	
9				−14 1573	6 41.4	−14 41		5.3	5.7	− Kr. 630.
10					6 41.8	−20 40			5½	cum. Messier 41.
11			11	−14 1584	6 42.3	−14 19		5.3	5.5	*
12			12	−20 1576	6 42.7	−20 54		5.9	6.6	
13				−18 1591	6 48.9	−18 55		5.5	6.1	
14			15	−20 1616	6 49.2	−20 6		4.7	5.3	
15		ϑ	14	−11 1681	6 49.5	−11 55		4.3	4.4	$5^c.4$ Kr. 648.
16		o^1	16	−24 4567	6 50.0	−24 4		4.2	3.9	
17			19	−19 1610	6 51.3	−20 1		4.7	4.9	UA: π Canis Mai.
18		μ	18	−13 1741	6 51.5	−13 55		5.2	5.5	$4^c.6$ Kr. 652.
19		ι	20	−16 1661	6 51.7	−16 55		4.3	4.9	
20		ε	21	−28 3666	6 54.7	−28 50		1.7	1.8	
21			22	−27 3544	6 57.7	−27 47		3.9	3.6	UA: σ Canis Mai.
22		o^2	24	−23 4797	6 58.8	−23 41		3.2	3.4	
23		γ	23	−15 1625	6 59.2	−15 29		4.2	4.5	
24		δ	25	−26 3916	7 4.3	−26 14		2.2	2.1	
25				−16 1802	7 5.1	−16 4		6.0	6.6	− Kr. 681.
26				−15 1676	7 5.4	−16 4		6.7	7.8	
27			28	−26 4073	7 10.8	−26 36		3.8	4.2	UA: ω Canis Mai.
28				−15 1734	7 11.7	−15 24		5.4	5.9	
29			30	−24 5176	7 14.6	−24 46		4.3	4.6	UA: τ Canis Mai.
30				−19 1813	7 14.7	−19 6		6.1	6.6	
31				−17 1917	7 14.8	−17 20		6.6	7.0	
32		R		−16 1898	7 14.9	−16 12		variabilis		$5^M.9$–$6^M.7$.
33				−14 1846	7 16.4	−14 10		5.6	6.2	
34		η		−29 4328	7 20.1	−29 6		2.5	2.9	
35	**Puppis**			−18 1806	7 17.8	−18 50		4.8	5.7	UA: Canis Mai.
36				−15 1810	7 20.1	−16 0		5.1	6.0	„ : „ „ − Kr. 704.
37				−18 1825	7 20.4	−18 49		6.3	6.8	„ : „ „
38				−13 2001	7 20.6	−13 33		5.7	6.4	„ : „ „
39				−17 1980	7 22.7	−17 40		5.6	6.2	„ : „ „

* BD. −14° 1579: $-0^m.3$, −6′.3; $7^M.8$.

Num.	Constellatio	Bay.	Fl.	B & CD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
40	**Puppis**			-14^0 1925	$7^h\ 24^m.8$	$-14^0\ 47'$		6.7	6.8	
41				−14 1971	7 29.2	−14 18		5.0	5.2	$6^c.8$ Kr. 720.
42					7 32.0	−14 15				cum. NGC. 2422.
43		κ		−26 4707	7 34.7	−26 34		3.8	4.0	
44				−14 2082	7 35.8	−15 2		5.3	5.4	$7^c.4$ Kr. 734.
45			2	−14 {2193, 2194}	7 40.9	−14 27		5.6	6.4	
46			4	−14 2199	7 41.3	−14 19		5.1	5.5	

Stellae comparandae:

R Canis Maioris	Be	28 . 31 . . . . 39 40
	Sr	28 30 31 33 . 37 38 . .
	Y	28 30 31 33 36 37 38 . 40

Charta VIII.

3796 **U Hydrae;** Periodus irregularis.

4826 **R Hydrae;** Max.: 2 411 931^d.0 (17. Iul. 1891) + 425^d.15 E (Inaequ. period.).

Num.	Constellatio	Bay.	Fl.	B & CD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	**Hydra**	α	30	− 8° 2680	9^h 22^m.7	− 8° 14′		2.3	2.1	
2		υ^2	40	−12 3073	10 0.3	−12 35		4.8	4.6	
3				−12 3101	10 5.2	−12 19		5.5	5.9	H: λ^1.
4		λ	41	−11 2820	10 5.7	−11 52		3.8	3.4	− Kr. 873; H: λ^2.
5				−11 2851	10 14.4	−12 2		6.1	6.4	
6		μ	42	−16 3052	10 21.3	−16 20		4.0	4.0	− Kr. 885.
7				−12 3181	10 26.1	−13 5		5.4	5.9	
8				−12 3194	10 28.3	−12 53		6.9	7.0	
9				−12 3205	10 30.4	−12 20		6.8	6.9	
10				−15 3087	10 31.4	−15 50		6.2	6.6	
11				−11 2918	10 31.5	−11 41		5.9	6.2	
12				−10 3094	10 32.2	−11 14		6.5	6.8	
13		U		−12 3218	10 32.6	−12 52	variabilis			4^M.5 − {6^M.1 / 6.3}; 8^c.1 Kr. 894.
14		φ	2	−16 3100	10 33.7	−16 22		5.2	5.3	
15				−11 2925	10 33.9	−11 55		5.9	6.4	
16				−13 3196	10 37.3	−13 16		6.7	6.9	
17				−13 3197	10 37.6	−13 27		6.5	6.8	
18		b^1	3	−16 3124	10 42.0	−16 46		5.6	5.8	
19				−14 3186	10 42.7	−14 44		6.5	6.7	
20		ν	4	−15 3138	10 44.7	−15 40		3.3	3.0	− Kr. 906.
21				−17 3245	10 46.2	−17 48		6.6	6.8	b^2 H. et UA.
22		b^2	6	−19 3125	10 48.6	−19 36		5.4	5.4	b^3 „
23				−19 3134	10 50.3	−20 8		6.6	6.9	
24		χ	9	−26 8338	11 0.5	−26 45		5.1	4.8	UA. et H: χ^1*.
25		ψ	45	−22 3515	13 3.7	−22 35		5.3	5.3	
26				−23 10974	13 9.0	−23 45		6.7	6.9	
27		γ	46	−22 3554	13 13.5	−22 39		3.2	3.2	
28		R		−22 3601	13 24.3	−22 46	variabilis **			{3^M.5 / 5.5} − 9^M.7; 8^c.0 Kr. 1054.
29				−21 3738	13 30.1	−21 31		7.1	6.9	UA: Virg.
30				−22 3630	13 31.7	−23 6		7.0	7.0	
31				−22 3645	13 36.0	−22 57		6.5	6.6	
32		π	49	−26 10095	14 0.7	−26 12		3.4	3.6	
33			50	−26 10158	14 7.0	−26 47		5.3	5.5	

* CD. — 26° 8342: + 0^m.6, + 0′.5; 6^M.4 ≡ UA et H: χ^2.

** Vide etiam Seriem IV.

Num.	Constellatio	Bay.	Fl.	B & CD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
34	Leo Maior	ε	17	+24° 2129	9h 40m.2	+24° 14′	3.2	3.1		
35		η	30	+17 2171	10 1.9	+17 15	3.8	3.6	3.7	
36		α	32	+12 2149	10 3.0	+12 27	1.8	1.3		
37		ζ	36	+24 2209	10 11.1	+23 55	3.8	3.8		
38		γ	41	+20 2467	10 14.5	+20 21	2.5	2.4		
39		ϱ	47	+10 2166	10 27.5	+ 9 49	4.0	3.9	3.9	
40			54	+25 2314	10 50.2	+25 17	4.5	4.3		
41		δ	68	+21 2298	11 8.8	+21 4	2.9	2.7		
42		ϑ	70	+16 2234	11 9.0	+15 59	3.6	3.4		
43		σ	77	+ 6 2437	11 16.0	+ 6 35	4.4	4.3	4.1	
44		ι	78	+11 2348	11 18.7	+11 5	4.3	4.2	4.0	
45			93	+21 2358	11 42.8	+20 46	4.8	4.6		
46		β	94	+15 2383	11 44.0	+15 8	2.6	2.3		
47	Sextans		8	− 7 2909	9 47.6	− 7 38		5.1	5.4	UA: γ Sext.
48			15	+ 0 2615	10 2.8	+ 0 7	4.7	4.4	4.9	„ α „
49			29	− 1 2395	10 24.4	− 2 14		5.4	5.5	„ δ „
50			30	+ 0 2663	10 25.2	− 0 8	5.4	4.9	5.2	„ β „
51	Crater	α	7	−17 3273	10 54.9	−17 46		4.3	4.4	– Kr. 915.
52		β	11	−22 3095	11 6.7	−22 17		4.6	4.6	
53		δ	12	−13 3345	11 14.3	−14 14		3.9	3.8	– Kr. (73).
54		γ	15	−16 3244	11 19.9	−17 8		4.3	4.2	
55		ϑ	21	− 8 3202	11 31.6	− 9 15		5.0	5.0	
56	Virgo	ν	3	+ 7 2479	11 40.7	+ 7 5	4.2	4.1	4.0	6c.0 Kr. 946.
57		β	5	+ 2 2489	11 45.5	+ 2 20	3.9	3.8	3.7	
58		π	8	+ 7 2502	11 55.7	+ 7 10	4.9	4.7	4.9	
59		o	9	+ 9 2583	12 0.1	+ 9 17	4.3	4.1	4.2	
60		η	15	+ 0 2926	12 14.8	− 0 7	4.3	4.0	4.0	
61		γ	29	− 0 2601	12 36.6	− 0 54		3.0	3.1	
62		δ	43	+ 4 2669	12 50.6	+ 3 56	3.6	3.7	3.5	6c.5 Kr. 1018.
63		ε	47	+11 2529	12 57.2	+11 30	3.1	2.9		
64		ϑ	51	− 4 3430	13 4.8	− 5 0		4.3	4.7	
65			53	−15 3613	13 6.7	−15 39		5.1	5.3	
66			55	−19 3651	13 8.8	−19 25		5.6	5.8	
67			57	−19 3653	13 10.5	−19 25		5.4	5.7	
68			61	−17 3813	13 13.2	−17 45		4.8	5.3	
69			63	−16 3650	13 17.7	−17 13		5.4	5.5	5c.6 Kr. 1046.
70		α	67	−10 3672	13 19.9	−10 38		1.1	1.5	
71			69	−15 3668	13 22.1	−15 27		5.0	5.0	
72			73	−17 3877	13 26.7	−18 13		5.9	6.2	
73			75	−14 3739	13 27.5	−14 51		5.7	6.0	
74		ζ	79	+ 0 3076	13 29.6	− 0 5	3.6	3.4	3.6	
75	Corvus	α	1	−24 10174	12 3.3	−24 10		4.2	4.2	
76		ε	2	−21 3487	12 5.0	−22 4		3.3	3.3	
77		γ	4	−16 3424	12 10.7	−16 59		2.7	2.5	
78		ζ	5	−21 3514	12 15.4	−21 40		5.4	5.3	
79		δ	7	−15 3482	12 24.7	−15 58		3.1	3.0	
80		η	8	−15 3489	12 26.9	−15 38		4.3	4.5	
81		β	9	−21 3401	12 29.1	−22 51		3.0	2.6	
82				−19 3629	12 58.4	−20 3		5.8	5.9	UA: Virg.
83	Coma Beren.		36	+18 2682	12 54.0	+17 57	4.8	5.0		6c.5 Kr. 1022.
84			42	+18 2697	13 5.1	+18 3	4.6	4.3	4.5	

Stellae comparandae:

U Hydrae	E	7	.	14	18
	Sr	7	11	14	.
	Y	7	11	14	18

R Hydrae	E	.	25	27	30	67	.	.	et 26 66
	H	.	25	.	.	.	.	.	et 42
	Hd	.	25	27	30	67	68	72	et 31 64 ι μ et 109 Virg. etc.
	S	.	25	27	.	.	68	72	
	Sr	.	25	27	.	67	.	.	et 32
	St	1	25	27	.	.	.	.	et 78
	W	1	25	27	.	.	.	.	et 4 75

Charta IX.

5374 δ Librae; Typus Algol, Periodus: $2^d\ 7^h\ 51^m\ 22^s.8$.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Virgo	μ	107	− 5° 3936	$14^h\ 37^m.8$	− 5° 13′		3.8	4.0	
2	Libra	μ	7	−13 3986	14 43.8	−13 44		5.4	5.7	
3		α	9	−15 3966	14 45.3	−15 38		3.0	3.0	Fl. 8: $-0^m.2$, $+2'.6$; $6\frac{1}{4}^M$.
4			13	−11 3827	14 49.0	−11 29		5.9	6.1	UA et H: ξ^1.
5		ξ	15	−10 3989	14 51.3	−11 0		5.7	5.7	„ „ „: ξ^2.
6			16	− 3 3696	14 52.0	− 3 56		4.6	4.8	
7			17	−10 3994	14 52.8	−10 45		6.4	7.2	
8			18	−10 3999	14 53.5	−10 44		5.8	6.3	
9				− 4 3783	14 53.7	− 4 35		6.0	6.5	
10		δ	19	− 7 3938	14 55.6	− 8 7		variabilis		$5^M.0-6^M.2$.
11				− 7 3943	14 56.7	− 7 57		7.1	7.0	
12				− 7 3944	14 56.8	− 7 11		6.6	6.6	
13				− 7 3946	14 57.2	− 7 27		6.7	6.8	
14		ν	21	−15 4026	15 1.1	−15 52		5.4	5.5	$6^c.0$ Kr. 1144.
15				−10 4055	15 7.8	−10 38		6.6	7.0	
16		β	27	− 8 3935	15 11.6	− 9 1		2.7	3.1	
17		o	29	−15 4083	15 15.4	−15 11		6.1	6.4	
18				−11 3940	15 18.4	−12 1		5.7	6.2	
19		ε	31	− 9 4138	15 18.8	− 9 58		4.9	5.5	
20			32	−16 4089	15 22.6	−16 22		5.8	5.9	$\equiv\zeta^1$ H.
21			34	−16 4099	15 25.0	−16 16		5.8	6.0	$\equiv\zeta^3$ H.
22		ζ	35	−16 4110	15 27.3	−16 31		5.6	5.8	$\equiv\zeta^2$ H.
23			37	− 9 4171	15 28.7	− 9 43		4.8	5.5	
24				− 8 4010	15 29.0	− 8 51		5.1	5.6	
25		γ	38	−14 4237	15 29.9	−14 27		4.1	4.4	
26				− 8 {4031, 4032}	15 33.3	− 8 28		5.9	6.2	

Stellae comparandae:

δ Librae	C	5	.	9	12	.	15	18	19	23	24	26	
	S	.	.	.	.	.	.	.	19	23	24	26	
	Sr	.	.	.	.	13	15	18	19	23	24	26	et 7 11
	St	.	6	9	12	.	.	.	19	.	.	.	et 2. De tribus aliis non constat quaenam sint.
	W	5	.	.	12	.	.	.	19	23	.	.	et 8
	Y	.	.	.	.	13	.	.	19	23	24	26	
	Z	.	6	9	.	.	.	.	.	.	.	.	

Charta X.

5758 X **Herculis**; Max.: 2 411 553^{d} (4. Iul. 1890) + 92^{d}.5 E. Irregularit. magnae.

5912 g **Herculis**; Variatio irregularis.

6181 α **Herculis**; Variatio irregularis.

6202 u **Herculis**; Periodus irregularis.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Bootes	β	42	+40° 2840	14^{h} 58^{m}.2	+40° 47′	3.7	3.5		
2		δ	49	+33 2561	15 11.5	+33 41	3.6	3.6		$4^{c}.0$ Kr. 1154.
3		μ	51	+37 2636	15 20.7	+37 44	4.6	4.2		
4		ν {	52	+41 2609	15 27.3	+41 10	5.1	5.2		ψ Herc.
5			53	+41 2611	15 28.2	+41 14	5.2	5.0		$6^{c}.5$ Kr. 1173.
6	Corona	η	2	+30 2653	15 19.1	+30 39	5.2	5.1		
7		β	3	+29 2670	15 23.7	+29 27	4.0	3.7		
8		ϑ	4	+31 2750	15 28.9	+31 42	4.5	4.1		
9		α	5	+27 2512	15 30.5	+27 3	2.6	2.3		
10		ζ	7	+37 2665	15 35.6	+36 58	4.8	4.5		
11		γ	8	+26 2722	15 38.5	+26 37	4.0	3.7		
12		R		+28 2477	15 44.5	+28 28	variabilis			Ser. III. $5^{M}.8$–$13^{M}.0$
13		δ	10	+26 2737	15 45.4	+26 23	4.8	4.8		
14		κ	11	+36 2652	15 47.4	+35 58	5.0	4.8		
15		ε	13	+27 2558	15 53.4	+27 10	4.3	4.3		
16		ι	14	+30 2738	15 57.4	+30 7	5.3	4.7		
17		τ	16	+36 2699	16 5.3	+36 44	5.0	4.7		
18	Serpens	δ	13	+11 2821	15 30.0	+10 52	4.1	3.7		
19		ι	21	+20 3138	15 37.1	+20 0	4.8	4.4	4.8	
20		β	28	+15 2911	15 41.6	+15 44	3.8	3.7		
21		κ	35	+18 3074	15 44.2	+18 27	4.2	4.3	4.4	
22		R		+15 2918	15 46.1	+15 26	variabilis			Ser. II. $\left.\begin{matrix}5^{M}.6\\7.6\end{matrix}\right\}$–$13^{M}$; $7^{c}.0$ Kr. 1198.
23		ρ	38	+21 2829	15 46.9	+21 17	5.0	5.0		$4^{c}.6$ Kr. 1199.
24		γ	41	+16 2849	15 51.8	+15 59	4.1	3.8	3.9	
25	Hercules	χ	1	+42 2648	15 49.2	+42 44	4.8	4.7		
26			2	+43 2542	15 51.3	+43 26	5.4	5.6		$6^{c}.1$ Kr. 1206.
27			4	+42 2652	15 52.1	+42 51	6.1	5.5		
28				+47 2288	15 58.5	+47 25	7.2	7.4		
29		X		+47 2291	15 59.7	+47 31	variabilis			$\left.\begin{matrix}5^{M}.9\\6.3\end{matrix}\right\}$–$\left\{\begin{matrix}6^{M}.8\\7.2\end{matrix}\right.$; $7^{c}.9$ Kr. 1212.
30		υ	6	+46 2142	15 59.7	+46 19	4.9	4.6		
31				+47 2300	16 4.0	+47 46	6.8	6.6		
32		φ	11	+45 2376	16 5.6	+45 12	4.5	4.2		

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
33	**Hercules**		14	+44° 2549	$16^{h}\ 7^{m}.2$	+44° 5′	6.7	6.5		
34				+42 2683	16 8.5	+42 38	6.0	6.0		
35				+40 3005	16 16.5	+39 57	5.6	5.3		
36		τ	22	+46 2169	16 16.7	+46 33	4.2	4.0		
37		γ	20	+19 3086	16 17.5	+19 23	4.0	3.7		
38			25	+37 2750	16 21.8	+37 36	5.8	5.5		
39				+41 2707	16 23.0	+41 2	7.0	7.0		
40		g	30	+42 2714	16 25.4	+42 6	variabilis			$\left.\begin{matrix}4^{M}.7\\5.5\end{matrix}\right\}-\left\{\begin{matrix}5^{M}.4\\6.0\end{matrix}\right.$; $6^{c}.5$ Kr. 1249.
41		β	27	+21 2934	16 25.9	+21 42	3.0	2.9		
42		σ	35	+42 2724	16 30.9	+42 39	4.5	4.3		
43			42	+49 2531	16 36.0	+49 7	5.0	5.1		$5^{c}.9$ Kr. 1261.
44		ζ	40	+31 2884	16 37.5	+31 47	3.2	2.9		
45		η	44	+39 3029	16 39.5	+39 7	3.8	3.6		
46			52	+46 2220	16 46.3	+46 9	5.0	4.8		
47		S		+15 3063	16 47.4	+15 7	variabilis			Ser. II. $\left.\begin{matrix}5^{M}.9\\7.5\end{matrix}\right\}-\left\{\begin{matrix}11^{M}.5\\13\end{matrix}\right.$; $6^{c}.8$ Kr. 1276.
48		ε	58	+31 2947	16 56.5	+31 4	4.2	3.8		
49		d	59	+33 2817	16 57.9	+33 44	5.6	5.3		
50		c		+36 2827	17 4.5	+36 4	5.7	5.2		
51		α	64	+14 3207	17 10.1	+14 30	variabilis			$3^{M}.1$–$3^{M}.9$; —Kr. 1295.
52		δ	65	+25 3221	17 10.9	+24 57	3.5	3.1		
53		π	67	+36 2844	17 11.6	+36 55	3.3	3.3		
54		u	68	+33 2864	17 13.6	+33 12	variabilis			$4^{M}.6$–$5^{M}.4$; $2^{c}.6$ Kr. 1299.
55		e	69	+37 2864	17 14.2	+37 24	4.8	4.7		
56		w	72	+32 2896	17 16.9	+32 37	5.7	5.3		
57		ϱ	75	+37 2878	17 20.2	+37 14	4.4	4.1		
58				+34 2971	17 23.2	+34 47	6.2	5.8		
59		λ	76	+26 3034	17 26.7	+26 11	4.6	4.5		$5^{c}.0$ Kr. 1315.
60		ι	85	+46 2349	17 36.6	+46 4	4.1	3.9		
61		μ	86	+27 2888	17 42.5	+27 47	3.6	3.5		
62		f	90	+40 3233	17 50.0	+40 2	5.2	5.0		
63		ϑ	91	+37 2982	17 52.8	+37 16	4.0	4.0		
64		ξ	92	+29 3156	17 53.9	+29 15	4.0	3.7		$4^{c}.6$ Kr. 1351.
65		ν	94	+30 3093	17 54.7	+30 12	4.7	4.3		
66		ο	103	+28 2925	18 3.6	+28 45	4.1	3.7		
67	**Ophiuchus**	ι	25	+10 3092	16 49.3	+10 20	4.6	4.3	5.0	
68		ϰ	27	+ 9 3298	16 52.9	+ 9 32	3.4	3.5	3.4	
69		α	55	+12 3252	17 30.3	+12 38	2.5	2.1		
70		β	60	+ 4 3489	17 38.5	+ 4 37	3.1	3.0	2.8	$5^{c}.0$ Kr. 1324.
71			72	+ 9 3564	18 2.6	+ 9 33	4.0	3.7	3.6	
72	**Lyra**	ϰ	1	+36 3094	18 16.4	+36 1	4.5	4.3		
73		μ	2	+39 3410	18 20.9	+39 27	5.4	5.1		
74		α	3	+38 3238	18 33.6	+38 41	0.4	0.1		

Stellae comparandae:

X Herculis	G	.	.	30	31
	Hn	27	28	.	31
	Sr	.	28	30	31
	Y	.	28	.	31

g Herculis	G	.	.	.	.	.	46	et 43
	P	25	30	35	38	42	46	et 33
	Sk	25	30	35	38	42	.	et 32
	Sr	.	30	35	38	.	.	et 17 34 45
	St	.	.	.	.	.	46	
	Y	25	.	.	38	.	46	et 16 27 28

α Herculis	A	.	41	.	52	.	.	67	68	70	
	B	.	41	.	52	61	64	.	68	70	et 44
	H	.	.	.	52	.	.	.	68	70	
	O	.	.	.	52	.	.	.	68	70	
	P	37	41	.	52	61	64	67	68	.	et 9 45
	Sb	37	.	48	52	.	.	.	68	70	
	Sr	.	.	.	.	.	.	.	68	70	
	St	.	.	48	.	.	.	.	68	.	et 53
	Z	.	.	.	52	.	.	.	68	.	et 69

u Herculis	G	49	.	56	.	.	
	Sk	49	55	56	.	.	et 50
	Sr	49	55	56	.	59	
	St	49	.	56	57	59	
	Y	49	55	56	57	.	
	Z	.	.	56	.	.	et 48 58

Charta XI.

6189 **U Ophiuchi;** Typus Algol, Periodus: $20^h\ 7^m\ 42^s.56$. Inaequ. period.

6404 **Y Ophiuchi;** Max.: 2 408 $694^d.25$ (5. Sept. 1882) + $17^d.1207$ E.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Hercules	h	29	+11° 3008	$16^h\ 27^m.9$	+11° 42′	4.9	4.9		$4^c.2$ Kr. 1252.
2		α	64	+14 3207	17 10.1	+14 30	variabilis			$3^M.1$–$3^M.9$; – Kr. 1295.
3	Ophiuchus	δ	1	– 3 3903	16 9.1	– 3 26		3.2	2.7	$7^c.0$ Kr. 1226.
4		ε	2	– 4 4086	16 13.0	– 4 27		3.4	3.3	
5		λ	10	+ 2 3118	16 25.9	+ 2 12	4.1	3.8	3.8	
6		ζ	13	–10 4350	16 31.7	–10 22		2.6	2.6	
7		ι	25	+10 3092	16 49.3	+10 20	4.6	4.3	5.0	
8		κ	27	+ 9 3298	16 52.9	+ 9 32	3.4	3.5	3.4	
9			30	– 4 4215	16 55.8	– 4 4		5.0	5.5	$6^c.6$ Kr. 1282.
10				+ 0 3629	17 0.2	+ 0 51	6.1	5.9	6.2	
11				– 0 3224	17 0.4	– 0 45		5.6	5.9	
12				– 1 3292	17 1.7	– 1 31		6.3	6.6	
13				– 0 3230	17 3.1	– 0 57		5.9	6.3	
14		η	35	–15 4467	17 4.6	–15 36		2.6	2.4	
15				+ 0 3649	17 5.1	+ 0 37	7.0	6.9	7.0	
16				+ 0 3654	17 7.8	+ 0 29	6.8	6.5	6.8	
17				+ 2 3283	17 11.2	+ 2 18	6.4	6.0	6.4	
18		U		+ 1 3408	17 11.5	+ 1 19	variabilis			$6^M.0$–$6^M.7$.
19			41	– 0 3255	17 11.5	– 0 20		4.8	5.1	
20				+ 1 3411	17 12.6	+ 1 51	7.0	6.6	6.9	
21				+ 3 3379	17 13.1	+ 3 15	7.0	6.8	7.0	
22		e	66	+11 3156	17 13.9	+10 58	5.0	5.2	5.7	66 Herculis. Magn. fund.
23				+ 2 3296	17 14.7	+ 2 14	6.9	6.9	6.6	$6^c.4$ Kr. 1302.
24				– 4 4275	17 21.3	– 5 0		4.5	4.5	
25		σ	49	+ 4 3422	17 21.6	+ 4 14	4.4	4.4	4.5	
26				+ 0 3697	17 23.7	+ 0 25	5.6	5.1	5.6	
27				– 5 4450	17 24.4	– 5 50		6.3	6.6	
28				– 0 3300	17 25.3	– 0 58		5.4	5.7	
29				+ 2 3337	17 26.4	+ 2 48	5.9	5.6	5.9	
30				– 5 4461	17 28.2	– 5 40		5.5	5.9	
31		α	55	+12 3252	17 30.3	+12 38	2.5	2.1		
32		μ	57	– 8 4472	17 32.4	– 8 3		4.5	4.7	
33				– 7 4487	17 38.4	– 7 2		6.2	6.6	
34		β	60	+ 4 3489	17 38.5	+ 4 37	3.1	3.0	2.8	$5^c.0$ Kr. 1324.
35					17 41.6	+ 5 42				cum.
36		γ	62	+ 2 3403	17 42.9	+ 2 45	4.1	3.7	3.9	
37		Y		– 6 4672	17 47.3	– 6 7	variabilis			$6^M.2$–$7^M.0$.
38				– 5 4519	17 47.3	– 5 14		6.9	7.0	
39				– 5 4523	17 47.9	– 5 54		6.9		

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
40	**Ophiuchus**			− 4° 4376	17h 51m.5	− 4° 4′		5.6	5.8	
41		ν	64	− 9 4632	17 53.5	− 9 46		3.4	3.5	
42				− 4 4384	17 54.3	− 4 49		6.0	6.1	
43			66	+ 4 3570	17 55.3	+ 4 22	4.9	4.8	5.4	
44			67	+ 2 3458	17 55.6	+ 2 56	4.2	3.9	4.2	
45			68	+ 1 3560	17 56.7	+ 1 18	4.6	4.4	5.1	
46				− 5 4560	17 57.4	− 5 21		6.7	6.9	
47		τ	69	− 8 4549	17 57.6	− 8 11		4.9	5.3	
48			70	+ 2 3482	18 0.4	+ 2 32	4.2	4.1	4.2	
49			71	+ 8 3582	18 2.5	+ 8 43	**4.8**	4.7	5.0	magn. fund.
50			72	+ 9 3564	18 2.6	+ 9 33	4.0	3.7	3.6	
51	**Serpens**	ν	53	−12 4722	17 15.2	−12 45		4.3	4.6	
52		ξ	55	−15 4621	17 31.9	−15 20		3.5	3.7	BD. −15° 4622: 0m.0, −10′.4; 6M.5.
53		ζ	57	− 3 4217	17 55.2	− 3 41		4.6	4.9	
54				− 4 4395	18 0.9	− 4 46		6.0	6.0	
55		η	58	− 2 4599	18 16.1	− 2 55		3.5	3.5	

Stellae comparandae:

U Ophiuchi	C	10	11	12	13	16	17	.	20	21
	Pr	.	.	.	.	.	17	.	20	.
	Sr	10	11	12	13	.	17	.	20	21
	Wg	.	.	.	.	.	17	.	20	.
	Y	10	11	12	13	.	17	19	.	.

Y Ophiuchi	Hn	33	38	39	40	42	.
	Sr	33	38	39	40	42	46
	Y	33	38	.	40	42	46

Charta XII.

6368 X Sagittarii; Max.: 2 404 291^{d}78 (16. Aug. 1870) + 7^{d}01185 E.

6472 W Sagittarii; Max.: 2 402 849^{d}45 (4. Sept. 1866) + 7^{d}59460 E.

6573 Y Sagittarii; Max.: 2 410 175^{d}02 (25. Sept. 1886) + 5^{d}7732 E.

Num.	Constellatio	Bay.	Fl.	C & BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Ophiuchus	η	35	−15° 4467	17h 4m6	−15° 36′		2.6	2.4	
2			36	−26 12026	17 9.2	−26 27		4.5	4.9	UA: A.
3			40	−20 4731	17 15.0	−21 0		4.5	5.1	„ : ξ.
4		ϑ	42	−24 13292	17 15.9	−24 54		3.2	3.6	CD. −24° 13288:
5			43	−28 13081	17 17.1	−28 3		5.4	5.8	−0m3, +5.′7; 6M8.
6			44	−24 13337	17 20.3	−24 5		4.1	4.5	UA: b.
7		d	45	−29 13557	17 21.0	−29 47		4.2	4.6	
8				−29 13563	17 21.3	−29 38		5.9	6.7	
9			51	−23 13412	17 25.3	−23 53		4.8	5.2	UA: c.
10				−26 12152	17 25.5	−26 12		6.0	6.2	
11				−27 11850	17 37.0	−27 50		6.4	6.8	
12			58	−21 4712	17 37.4	−21 38		4.8	5.4	
13	Scorpius	υ	34	−37 11638	17 24.0	−37 13		2.7	3.2	
14		λ	35	−37 11673	17 26.8	−37 2		1.8	2.0	
15	Serpens	ξ	55	−15 4621	17 31.9	−15 20		3.5	3.7	BD. −15° 4622: 0m0, −10.′4; 6M5.
16	Sagittarius	X	3	−27 11930	17 41.3	−27 48	variabilis			4M–6M.
17				−26 12367	17 42.2	−26 56		6.2	6.7	
18				−30 15035	17 52.7	−30 15		5.1	5.4	
19			4	−23 13731	17 53.7	−23 48		4.7	5.4	
20				−22 4503	17 55.8	−22 47		5.7	6.3	
21			7	−24 13793	17 56.7	−24 17		5.6	5.9	
22			9	−24 13814	17 57.8	−24 22			6.0	cum. Messier 8.
23		W		−29 14447	17 58.6	−29 35	variabilis			4M8–5M8.
24		γ	10	−30 15215	17 59.4	−30 26		3.0	2.8	
25				−28 14174	18 1.8	−28 28		4.7	5.1	
26				−30 15316	18 3.6	−30 45		5.6	5.9	
27				−23 14047	18 5.6	−23 43		5.0	5.7	
28		μ	13	−21 4908	18 7.8	−21 5		3.9	4.3	4c2 Kr. 1384.
29			14	−21 4916	18 8.3	−21 44		5.6	6.0	5c7 Kr. 1388.
30			15	−20 5054	18 9.3	−20 46		5.3	5.8	– Kr. 1392.
31			16	−20 5055	18 9.3	−20 25		5.9	6.6	
32				−18 4864	18 9.6	−18 42		6.1	6.5	
33				−17 5112	18 11.4	−17 25		5.9	6.4	
34				−27 12684	18 11.8	−27 5		4.7	5.1	
35		δ	19	−29 14834	18 14.6	−29 52		3.0	2.8	
36		Y		−18 4926	18 15.5	−18 54	variabilis			5M8–6M6.

Num.	Constellatio	Bay.	Fl.	C & BD.	1900 α	δ	PD.	HP.	UA.	Notae
37	**Sagittarius**	ε	20	−34° 12784	18h 17m.5	−34° 26′		1.8	2.2	
38			21	−20 5134	18 19.4	−20 36		5.0	5.1	5c.0 Kr. 1417.
39		λ	22	−25 13149	18 21.8	−25 29		2.9	2.7	
40				−17 5203	18 22.1	−17 52		6.0	6.6	
41				−18 4982	18 24.3	−18 48		5.9	6.0	
42				−18 4988	18 25.6	−18 28		5.2	5.5	
43		φ	27	−27 13170	18 39.4	−27 6		3.2	3.7	
44		σ	34	−26 13595	18 49.1	−26 25		2.0	2.4	
45		ζ	38	−30 16575	18 56.3	−30 2		2.8	3.1	
46		τ	40	−27 13564	19 0.7	−27 49		3.4	3.6	

Stellae comparandae:

X Sagittarii	M	.	.	.	.	.	19	25
	Sr	2	6	7	9	.	19	25
	St	.	6	7	9	.	.	.
	Y	.	.	7	9	10	.	.

W Sagittarii	M	.	18	.	.	25	26	.
	Sr	9	18	19	.	25	26	34
	St	.	.	.	.	25	.	.
	Y	.	18	.	24	25	.	.

Y Sagittarii	M	.	.	.	32	.	38	.	41	42
	Sr	29	30	31	32	33	.	40	41	.
	Y	.	.	31	.	33	38	40	41	.

Charta XIII.

6758 **β Lyrae;** Min.: $2\,398\,590^{d}.63$ ($6^{d}.63$. Ian. 1855) + $12^{d}.90791$ E.*

6794 **R Lyrae;** Max.: $2\,410\,559^{d}.3$ (14. Oct. 1887) + $46^{d}.4$ E.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Hercules	ι	85	+46° 2349	$17^{h}\,36^{m}.6$	+46° 4′	4.1	3.9		
2		μ	86	+27 2888	17 42.5	+27 47	3.6	3.5		
3		f	90	+40 3233	17 50.0	+40 2	5.2	5.0		
4		ϑ	91	+37 2982	17 52.8	+37 16	4.0	4.0		
5		ξ	92	+29 3156	17 53.9	+29 15	4.0	3.7		$4^{c}.6$ Kr. 1351.
6		ν	94	+30 3093	17 54.7	+30 12	4.7	4.3		
7		ο	103	+28 2925	18 3.6	+28 45	4.1	3.7		
8				+43 2892	18 4.5	+43 27	5.3	5.1		
9		A	104	+31 3199	18 8.1	+31 22	5.1	5.2		$6^{c}.5$ Kr. 1387.
10	Lyra	ϰ	1	+36 3094	18 16.4	+36 1	4.5	4.3		
11		μ	2	+39 3410	18 20.9	+39 27	5.4	5.1		
12				+34 3245	18 31.6	+34 22	6.4	6.0		
13				+33 3154	18 33.0	+33 23	5.7	5.6		
14		α	3	+38 3238	18 33.6	+38 41	0.4	0.1		
15		ε	4	+39 3510	18 41.0	+39 34	5.0	4.8		
16			5	+39 3509	18 41.1	+39 30	4.9	4.5		
17		ζ	6	+37 3222	18 41.3	+37 30	4.7	4.2		
			7	+37 3223	18 41.4	+37 29	6.2	5.8		
18		ν	9	+32 3228	18 46.2	+32 26	5.4	5.2		
19		β	10	+33 3223	18 46.4	+33 15	variabilis			$3^{M}.4-4^{M}.5$.
20		δ¹	11	+36 3307	18 50.2	+36 51	6.0	5.6		
21		δ²	12	+36 3319	18 51.0	+36 46	4.4	4.5		$6^{c}.9$ Kr. 1492.
22		R	13	+43 3117	18 52.3	+43 49	variabilis			$4^{M}.0-4^{M}.7$; $7^{c}.5$ Kr. 1498.
23		γ	14	+32 3286	18 55.2	+32 33	3.6	3.3		
24		λ	15	+31 3424	18 56.2	+32 0	5.1	5.1		$4^{c}.3$ Kr. 1506.
25			16	+46 2602	18 58.6	+46 48	5.3	5.1		
26		ι	18	+35 3485	19 3.7	+35 57	5.5	5.2		
27		η	20	+38 3490	19 10.4	+38 58	4.8	4.3		
28		ϑ	21	+37 3398	19 12.9	+37 57	4.6	4.6		
29	Cygnus	β	6	+27 {3410, 3411}	19 26.7	+27 45	{3.2, 5.7}	3.2		$7^{c}.2$ Kr. 1573.
30		δ	18	+44 3234	19 41.8	+44 53	3.2	2.9		

* Minimum secundarium medium inter bina min. princip.

Stellae comparandae:

β Lyrae	A	.	4	5	7	.	(15	16)	17	(20	21)	23	.	
	Be	.	.	.	.	.	(15	16)	.	.	.	23	.	et 29
	G	.	.	.	.	.	.	.	.	.	.	23	.	
	H	.	4	5	7	10	(15	16)	17	(20	21)	23	.	
	L	.	.	.	.	.	(15	16)	17	(20	21)	23	.	
	O	.	4	5	7	.	(15	16)	17	(20	21)	23	.	
	P	2	4	5	7	10	(15	16)	17	(20	21)	23	28	et 11 27
	S	2	4	5	7	10	(15	16)	17	(20	21)	23	.	
	Sb	2	.	5	7	.	(15	16)	17	(20	21)	23	.	
	Sr	.	4	.	7	10	.	.	17	(20	21)	23	.	et 18
	St	.	.	.	.	.	.	.	.	(20	21)	23	.	
	W	.	.	5	7	.	(15	16)	17	(20	21)	23	28	
	Wg	.	4	5	7	.	(15	16)	17	(20	21)	23	.	
	Y	.	.	.	7	10	(15	16)	17	.	.	23	.	et 24
	Z	.	.	.	.	.	.	.	17	(20	21)	23	.	

R Lyrae	P	.	10	11	(15	16)	17	(20	21)	23	25	26	27	28
	Sr	4	.	.	.	.	.	.	.	.	25	.	27	28
	Y	.	.	.	.	.	.	.	.	.	25	.	27	.

Charta XIV.

6613 d **Serpentis;** Periodus: 8^d.72.

6733 R **Scuti;** Periodus: 71^d.1? — Inaequalitates magnae.

6984 U **Aquilae;** Max.: 2 410 170^d.15 (20. Sept. 1886) + 7^d.0240 E.

7124 η **Aquilae;** Max.: 2 396 168^d.6253 (20. Mai. 1848) + 7^d.176381 E.

7149 S **Sagittae;** Max.: 2 406 602^d.60 (13. Dec. 1876) + 8^d.38320 E.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	**Ophiuchus**		66	+ 4° 3570	17^h 55^m.3	+ 4° 22′	4.9	4.8	5.4	
2			67	+ 2 3458	17 55.6	+ 2 56	4.2	3.9	4.2	
3			68	+ 1 3560	17 56.7	+ 1 18	4.6	4.4	5.1	
4			70	+ 2 3482	18 0.4	+ 2 32	4.2	4.1	4.2	
5			71	+ 8 3582	18 2.5	+ 8 43	4.8	4.7	5.0	magn. fund.
6			72	+ 9 3564	18 2.6	+ 9 33	4.0	3.7	3.6	
7			74	+ 3 3680	18 15.9	+ 3 20	5.0	5.0	5.5	
8				+ 9 3783	18 31.7	+ 9 3	5.5	5.4	5.7	
9		**X**		+ 8 3780	18 33.6	+ 8 44		variabilis		Ser. IV. 6^M.8–9^M.0; – Kr. 1452.
10	**Serpens**	η	58	– 2 4599	18 16.1	– 2 55		3.5	3.5	
11		**d**	59	+ 0 3936	18 22.1	+ 0 8		variabilis		5^M.0–5^M.7.
12		c	60	– 2 4641	18 24.5	– 2 3		5.4	5.8	5^c.0 Kr. 1426.
13		e		– 0 3521	18 32.5	– 0 24		5.8	6.1	
14		ϑ	63	+ 4 {3916 3917	18 51.2	+ 4 4	{5.0 5.4	4.5	4.5 4.7	
15	**Hercules**		111	+18 3823	18 42.6	+18 4	4.4	4.2		
16	**Scutum**			– 6 4859	18 38.5	– 6 55		6.2	6.7	
17				– 6 4869	18 39.3	– 6 38		7.0		– Kr. 1465.
18				– 6 4897	18 41.8	– 6 0		6.9		
19				– 4 4582	18 41.9	– 4 51		4.5	4.5	UA: β.
20		**R**		– 5 4760	18 42.2	– 5 49		variabilis		4^M.7–{6^M 9 ; 5^c.8 Kr. 1474.
21				– 6 4913	18 43.3	– 6 7		6.5	7.0	
22				– 6 4922	18 44.3	– 6 2		6.2	6.5	4^c.7 Kr. 1478.
23					18 45.8	– 6 24				neb. Messier 11.
24				– 6 4976	18 51.7	– 5 59		5.1	5.4	UA: η. 5^c.1 Kr. 1495.
25	**Aquila**		4	+ 1 3766	18 39.8	+ 1 57	5.1	4.9	5.5	
26			5	– 1 3559	18 41.3	– 1 4		5.6	6.2	
27			10	+13 3838	18 54.2	+13 47	6.3	5.8	6.5	
28			11	+13 3841	18 54.5	+13 29	5.4	5.3	5.8	
29		ε	13	+14 3736	18 55.1	+14 56	4.3	4.2		
30			12	– 5 4840	18 56.3	– 5 53		4.2	3.8	5^c.6 Kr. 1507.
31		g	14	– 3 4460	18 57.6	– 3 51		5.4	5.7	
32		**V**		– 5 4858	18 59.1	– 5 50		variabilis		Ser. IV. 6^M.5–8^M.0; 8^c.5 Kr. 1513.
33		h	15	– 4 4684	18 59.7	– 4 11		5.2	5.6	5^c.7 Kr. 1515.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
34	Aquila	ζ	17	+13° 3899	19^{h} $0^{m}.8$	+13° 43′	3.3	3.0		
35		λ	16	− 5 4876	19 0.9	− 5 2		3.5	3.3	
36		R		+ 8 3970	19 1.6	+ 8 5		variabilis		Ser. II. $5^{M}.9$–$11^{M}.5$; $8^{c}.8$ Kr. 1520.
37			18	+10 3787	19 2.3	+10 55	5.3	5.1	5.6	Olim Y Aquilae. Magn. fund.
38			20	− 8 4887	19 7.3	− 8 6		5.2	5.9	
39		ω	25	+11 3790	19 13.1	+11 25	5.4	5.1	5.7	
40				− 6 5103	19 14.7	− 6 48		7.0		$6^{c}.8$ Kr. 1544.
41		A	28	+12 3879	19 15.0	+12 11	5.7	5.3	5.9	
42			29	+11 3802	19 15.2	+11 20	6.3	5.9	6.6	
43		f	26	− 5 4936	19 15.2	− 5 36		5.2	5.6	
44				− 8 4950	19 16.9	− 8 23		6.5	6.9	
45				− 7 4942	19 17.7	− 7 35		6.4	6.7	– Kr. 1552.
46		b	31	+11 3833	19 20.2	+11 44	5.3	5.3	5.6	
47		δ	30	+ 2 3879	19 20.5	+ 2 55	3.7	3.4	3.4	
48		ν	32	+ 0 4206	19 21.4	+ 0 8	4.8	4.8	5.4	
49		U		− 7 4968	19 24.0	− 7 15		variabilis		$6^{M}.4$–$7^{M}.1$.
50		c	36	− 3 4612	19 25.4	− 3 0		5.1	5.6	$4^{c}.5$ Kr. 1569.
51				− 6 5170	19 25.5	− 6 43		7.3		
52		μ	38	+ 7 4132	19 29.2	+ 7 10	4.6	4.5	5.3	$4^{c}.5$ Kr. 1580.
53			37	−10 5122	19 29.6	−10 47		5.2	5.8	$5^{c}.7$ Kr. 1581.
54				− 7 4998	19 30.1	− 7 41		6.4	6.7	
55		κ	39	− 7 5006	19 31.5	− 7 15		4.9	5.4	
56		ι	41	− 1 3782	19 31.6	− 1 31		4.3	4.6	
57				+14 3974	19 31.7	+14 10	6.7	6.4		
58			42	− 4 4861	19 32.5	− 4 52		5.4	5.8	
59		σ	44	+ 5 4225	19 34.3	+ 5 10	5.3	5.0	5.8	
60				− 5 5036	19 35.0	− 5 41		6.9	6.9	
61				+13 4098	19 36.5	+13 35	6.1	5.7	6.1	
62		ψ	48	+12 4059	19 39.9	+13 4	6.5	6.1	6.2	BD. +12° 4060: $0^{m}.0$, {−5.′5; $7^{M}.4$.
63		γ	50	+10 4043	19 41.5	+10 22	3.1	2.8		$5^{c}.8$ Kr. 1612.
64				−11 5131	19 43.5	−11 7		6.2	6.4	– Kr. 1618.
65			51	−11 5149	19 45.3	−11 1		5.6	5.8	
66		α	53	+ 8 4236	19 45.9	+ 8 36	1.1	0.7	1.1	
67		η	55	+ 0 4337	19 47.4	+ 0 45		variabilis		$3^{M}.5$–$4^{M}.7$.
68			56	− 8 5150	19 48.7	− 8 50		6.1	6.2	
69			57	− 8 {5154, 5155}	19 49.2	− 8 {29, 30}		5.2	{6.4, 7.1}	
70		β	60	+ 6 4357	19 50.4	+ 6 9	3.9	3.8	3.9	
71				−10 5238	19 54.4	−10 13		5.9	6.1	
72		ϑ	65	− 1 3911	20 6.1	− 1 7		3.2	3.0	
73	Sagitta	ε	4	+16 3918	19 32.8	+16 14	5.7	5.7		
74		α	5	+17 4042	19 35.6	+17 47	4.5	4.3		
75		β	6	+17 4048	19 36.6	+17 15	4.6	4.4		– Kr. (111).
76		δ	7	+18 4240	19 42.9	+18 17	3.9	3.9		$6^{c}.5$ Kr. 1614.
77		ζ	8	+18 4254	19 44.5	+18 53	5.2	4.9		
78			9	+18 4276	19 47.9	+18 25	6.5	6.3		
79		S	10	+16 4067	19 51.5	+16 22		variabilis		$5^{M}.6$–$6^{M}.4$.
80			11	+16 4081	19 53.2	+16 31	5.7	5.5		
81				+16 4086	19 53.7	+16 13	7.1	6.8		
82		γ	12	+19 4229	19 54.3	+19 13	3.8	3.8		$7^{c}.0$ Kr. 1640.
83			13	+17 4183	19 55.5	+17 15	5.5	5.6		$6^{c}.7$ Kr. 1644.
84			14	+15 4033	19 58.9	+15 45	5.7	5.6	6.0	
85			15	+16 4121	19 59.6	+16 48	5.7	5.8		AGC. Berlin A: $6^{M}.7$.
86		η	16	+19 4277	20 0.7	+19 42	5.0	5.2		

Stellae comparandae:

d Serpentis	Hn	7	12	13	14	25					
	Sr	7	12	.	.	.					
	Y	7	12	13	.	25					
R Scuti .	H	.	.	.	22	24	30	31	33		
	Hd	18	19	21	22	24	.	31	.		
	Hn	18	19	.	22	24	.	31	.		
	O	.	19	21	22	24	.	31	33		
	P	.	19	21	.	.	.	31	.		
	S	.	.	21	22	24	.	31	33		
	Sr	18	19	21	22	24	30	31	33	et 17	
	Wg	.	.	21	22	24	.	.	.		
	Y	.	19	21	22	.	.	31	33		
U Aquilae	Hn	.	45	51	54	.	58	.	.	.	
	Sr	40	45	51	54	.	.	64	68	71	
	Y	40	45	51	.	55	.	64	68	71	
η Aquilae	A	29	47	48	52	56	.	70	.		
	H	29	47	.	52	56	.	70	.		
	O	.	47	48	52	56	63	70	72		
	P	.	47	48	52	56	.	70	72		
	S	29	47	48	52	56	.	70	.		
	Sb	.	47	.	.	56	.	70	.		
	Sr	29	47	.	52	56	.	70	.		
	St	.	.	.	.	56	.	70	.		
	W	29	47	.	52	56	.	70	.		
	Y	.	47	48	52	56	.	70	.		
	Z	.	.	.	52	.	63	70	.		
S Sagittae	C	.	.	78	80	81	83	84	.		
	G	.	.	78	80	81	83	84	85		
	Hn	.	73	78	80	81	.	.	.		
	Sr	57	73	.	80	81	83	84	.		
	Y	.	.	78	80	81	83	84	.		

Charta XV.

7120 χ **Cygni;** Max.: 2 365 136^{d}.5 (3. Iun. 1763) + 406^{d}.02 E. Inaequ. period.

7437 X **Cygni;** Max.: 2 410 190^{d}.90 (10. Oct. 1886) + 16^{d}.3855 E.

7483 T **Vulpeculae;** Max.: 2 409 848^{d}.95 (2. Nov. 1885) + 4^{d}.4360 E.

7754 W **Cygni;** Max.: 2 409 506^{d} (25. Nov. 1884) + 131^{d}.5 E.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	**Cygnus**	$\varkappa$	1	+53 2216	19^{h} 14^{m}.8	+53° 11′	4.0	4.0		
2			2	+29 3584	19 20.2	+29 26	5.1	4.8		
3			4	+36 3557	19 22.6	+36 7	5.4	5.3		
4		β	6	+27 {3410, 3411}	19 26.7	+27 45	{3.2, 5.7}	3.2		7^{c}.2 Kr. 1573.
5		ι	10	+51 2605	19 27.2	+51 31	4.0	4.0		
6			8	+34 3590	19 28.1	+34 14	4.9	4.9		
7			9	+29 3651	19 30.9	+29 15	5.5	5.3		
8				+28 3412	19 33.2	+28 17	6.9	6.7		
9		ϑ	13	+49 3062	19 33.8	+49 59	4.6	4.5		
10		φ	12	+29 3684	19 35.4	+29 55	4.8	4.8		magn. fund.
11				+33 3547	19 36.0	+33 45	6.3	6.2		
12				+28 3447	19 38.8	+29 6	6.8	6.4		
13				+32 3531	19 38.9	+32 11	6.2	5.9		
14		c	16	+50 {2847, 2848}	19 39.2	+50 {18, 17}	6.3, 6.3	6.0		
15				+30 3706	19 39.2	+30 26	6.3	6.0		
16				+33 3572	19 40.1	+33 55	6.4	5.9		
17			15	+37 3586	19 40.7	+37 7	4.5	5.0		
18		**SU**		+28 3460	19 40.8	+29 1	variabilis			6^{M}.6–7^{M}.4.*
19		δ	18	+44 3234	19 41.8	+44 53	3.2	2.9		
20			17	+33 3587	19 42.6	+33 30	5.1	5.1		
21				+32 3558	19 42.8	+32 39	6.3	6.2		
22				+33 3602	19 45.0	+33 11	6.8	6.2		
23		χ		+32 3593	19 46.7	+32 40	variabilis			4^{M}.0–13^{M}.5; 7^{c}.8 Kr. 1624.**
24		d	20	+52 2547	19 48.1	+52 44	5.1	5.2		
25			22	+38 3817	19 52.3	+38 13	5.1	5.0		
26		η	21	+34 3798	19 52.6	+34 49	4.2	4.0		
27		ψ	24	+52 2572	19 53.0	+52 10	5.1	4.8		
28			25	+36 3806	19 56.3	+36 46	5.4	5.1		
29		e	26	+49 3158	19 58.5	+49 50	5.1	5.4		
30		b^1	27	+35 3959	20 2.7	+35 42	5.6	5.5		3^{c}.9 Kr. 1671.
31		b^2	28	+36 3907	20 5.7	+36 33	5.2	4.8		

* Vide AN. n. 3483. Periodus 3^{d}.84 . . .

** Vide etiam Seriem III.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
32	**Cygnus**	o^1	30	+46° 2881	$20^h\ 10^m.2$	+46° 31′	5.0	5.0		
33		o^1	31	+46 2882	20 10.5	+46 26	4.1	4.0		$6^c.3$ Kr. 1702.
34		b^3	29	+36 3955	20 10.8	+36 30	5.3	5.1		
35		o^2	32	+47 3059	20 12.4	+47 24	4.3	4.3		$5^c.6$ Kr. 1708.
36		P	34	+37 3871	20 14.1	+37 43	5.0	4.9		Nova 1600.
37			36	+36 3998	20 14.7	+36 41	6.0	5.5		
38			35	+34 3967	20 14.8	+34 40	5.3	5.2		
39		γ	37	+39 4159	20 18.6	+39 56	2.5	2.3		
40			39	+31 4062	20 19.9	+31 52	4.6	4.7		
41				+37 3916	20 20.0	+37 9	6.1	6.0		
42			40	+37 3941	20 23.9	+38 7	5.9	5.5		
43			41	+29 4057	20 25.3	+30 2	4.3	4.1		
44			42	+35 4141	20 25.5	+36 7	6.1	5.9		
45		$ω^1$	45	+48 3142	20 27.0	+48 37	5.2	4.9		
46			44	+36 4105	20 27.2	+36 36	6.4	6.3		
47		$ω^2$	46	+48 3154	20 28.2	+48 53	5.6	5.6		$7^c.0$ Kr. 1769.
48			47	+34 4079	20 30.0	+34 55	4.8	4.9		$6^c.9$ Kr. 1771.
49			48	+31 {4159 4160	20 33.5	+31 {13 10	6.7 6.7	6.2 6.4		
50				+29 4121	20 34.9	+29 59	5.8	5.9		
51				+34 4111	20 36.0	+35 2	7.1	6.8		
52				+29 4131	20 36.5	+29 27	6.3	6.1		
53				+34 4114	20 36.9	+34 41	7.4	7.2		
54			49	+31 4181	20 37.0	+31 57	5.7	5.7		magn. fund.
55				+35 4219	20 37.8	+35 11	7.7	7.4		
56		α	50	+44 3541	20 38.0	+44 55	1.6	1.3		
57				+34 4127	20 38.5	+35 6	7.0	6.4		
58			51	+49 3353	20 39.1	+49 59	5.7	5.4		
59				+35 {4231 4233	20 {39.2 39.4	+35 {24 23				BD. $8^M.7$ et $8^M.5$.
60		X		+35 4234	20 39.5	+35 14	variabilis			$6^M.4$–$7^M.7$.*
61			52	+30 4167	20 41.5	+30 21	4.5	4.4		
62		ε	53	+33 4018	20 42.2	+33 36	2.7	2.6		$5^c.4$ Kr. 1800.
63				+33 4028	20 43.2	+34 0	5.2	5.1		Olim T Cygni. $4^c.2$ Kr. 1804.
64		λ	54	+35 4267	20 43.5	+36 7	4.8	4.4		
65				+35 4282	20 45.3	+35 12	6.7	6.7		
66			57	+43 3755	20 49.7	+44 0	5.0	4.8		
67		ν	58	+40 4364	20 53.4	+40 47	4.2	4.0		
68		f^1	59	+46 3133	20 56.4	+47 8	4.5	5.0		
69			60	+45 3364	20 57.7	+45 46	5.6	5.3		AGC. Bonn: $6^M.9$.
70		ξ	62	+43 3800	21 1.3	+43 32	3.9	3.9		$7^c.0$ Kr. 1855.
71			61	+38 {4343 4344	21 2.4	+38 15	{5.4 6.1	5.1		$5^c.0$ Kr. 1859.
72		f^2	63	+47 3292	21 3.2	+47 15	4.6	4.8		– Kr. 1862.
73		ζ	64	+29 4348	21 8.7	+29 49	3.5	3.5		
74		τ	65	+37 4240	21 10.8	+37 37	4.0	3.8		
75		σ	67	+38 4431	21 13.5	+38 59	4.5	4.2		≡ Fl. 66 Uran. Nov.
76		υ	66	+34 4371	21 13.8	+34 29	4.6	4.4		≡ Fl. 67 „ „
77		A	68	+43 3877	21 14.7	+43 31	5.1	5.1		
78				+46 3305	21 21.6	+46 17		5.6		
79			69	+36 4557	21 21.7	+36 14	6.2	5.9		
80			70	+36 4568	21 23.3	+36 41	5.5	5.3		

* BD. +35°4237: $+0^m.2$, $+0'.2$; $9^M.0$.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	δ	PD.	HP.	UA.	Notae
81	**Cygnus**	g	71	+45° 3558	$21^{h} 25^{m}.8$	+46° 6′	5.4	5.4		
82				+45 3584	21 29.6	+45 25	6.2	6.6		$4^{c}.0$ Kr. 1923.
83		ϱ	73	+44 3865	21 30.2	+45 9	4.3	4.1		
84			72	+37 4359	21 30.7	+38 5	5.0	5.0		
85				+43 3975	21 31.3	+43 15	7.0	6.7		
86		**W**		+44 3877	21 32.2	+44 56	variabilis			$5^{M}.0$–$6^{M}.7$; $6^{c}.5$ Kr. 1926.
87			74	+39 4612	21 32.9	+39 58	5.3	5.1		
88				+44 3889	21 33.6	+44 15	6.4	6.1		
89				+43 4002	21 36.0	+43 59	6.9	6.7		
90			75	+42 4177	21 36.3	+42 49	5.2	5.4		$6^{c}.1$ Kr. 1928.
91				+45 3637	21 38.3	+45 19	6.2	6.6		$6^{c}.5$ Kr. 1935.
92		π^1	80	+50 3410	21 38.5	+50 44	4.9	4.7		
93				+40 4623	21 39.1	+40 42	5.5	5.6		
94				+46 3422	21 40.7	+46 24	6.7	6.6		
95		π^2	81	+48 3504	21 43.1	+48 51	4.5	4.1		
96	**Vulpecula**		15	+27 3587	19 57.0	+27 29	4.9	4.7		
97			23	+27 3666	20 11.6	+27 30	4.6	4.7		$5^{c}.8$ Kr. 1705.
98			27	+25 4302	20 32.8	+26 7	5.9	5.4		
99		**T**		+27 3890	20 47.2	+27 53	variabilis			$5^{M}.5$–$6^{M}.5$.
100			31	+26 4017	20 47.9	+26 43	4.8	4.7		
101				+27 3909	20 50.1	+28 9	6.9	6.4		
102			32	+27 3911	20 50.3	+27 41	5.1	5.3		

Stellae comparandae:

χ Cygni . .	A	. 7 10 13 14 15 . 20 21 22 26 et 5
	G	6 . . 13 . . . 20 21 22 26 et 28 30
	H	. 7 10 13 . 15 . 20 21 22 26
	Hd	. . . 13 . . 16 20 21 22 26 Praeterea: ξ Herc.; γ, η, ϑ Lyrae
	O	. 7 10 13 . 15 16 20 21 . .
	S	. 7 10 13 . . 16 20 21 22 26
	Sr	6 . 10 13 . . . 20 21 22 26
	St	. . 10 . 14 . . 20 . . 26
	W	. . 10 13 . . . 20 . . 26 et 17
	Wg	. . . . . . 16 20 21 22 . et 11

X Cygni . .	Hn	44 . 51 . 55 57 .
	Sr	44 46 51 . . 57 65
	Y	44 . 51 53 . 57 .

T Vulpeculae	G	. 54 . 100 101 102
	Sr	50 54 98 . 101 102
	Y	50 . . . 101 .

W Cygni . .	G	. . 82 83 85 88 . 90 91
	Sr	78 81 82 . . 88 89 . .
	Y	78 81 82 . 85 88 . 90 91

Charta XVI.

7803 *μ* **Cephei;** Periodus irregularis.

8073 *δ* **Cephei;** Max.: 2 393 375^d.45 (26^d.45. Sept. 1840) + 5^d.366 428 E.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	**Cassiopeia**	β	11	+58° 3	0^h 3^m.8	+58° 36′	2.6	2.4		
2		κ	15	+62 102	0 27.3	+62 23	4.4	4.3		
3		ζ	17	+53 105	0 31.4	+53 21	4.1	3.8		
4		α	18	+55 139	0 34.8	+55 59	variabilis			2^M.2–2^M.8; 4^c.8 Kr. 52.
5		η	24	+57 150	0 43.0	+57 17	3.8	3.6		
6		γ	27	+59 144	0 50.7	+60 11	2.5	2.2		
7		δ	37	+59 248	1 19.3	+59 43	3.0	2.8		
8		ε	45	+62 320	1 47.2	+63 11	3.6	3.4		
9		ι		+66 213	2 20.8	+66 57	4.7	4.6		
10	**Draco**	δ	57	+67 1129	19 12.5	+67 29	3.2	3.3		
11		ε	63	+69 1070	19 48.5	+70 1	3.9	4.0		
12	**Cygnus**		33	+56 2376	20 11.1	+56 16	4.7	4.2		
13		α	50	+44 3541	20 38.0	+44 55	1.6	1.3		
14		ν	58	+40 4364	20 53.4	+40 47	4.2	4.0		
15		ξ	62	+43 3800	21 1.3	+43 32	3.9	3.9		7^c.0 Kr. 1855.
16		σ	67	+38 4431	21 13.5	+38 59	4.5	4.2		
17		ϱ	73	+44 3865	21 30.2	+45 9	4.3	4.1		
18		π^1	80	+50 3410	21 38.5	+50 44	4.9	4.7		
19		π^2	81	+48 3504	21 43.1	+48 51	4.5	4.1		
20	**Cepheus**	κ	1	+77 764	20 12.3	+77 25	4.5	4.4		
21		ϑ	2	+62 1821	20 27.9	+62 39	4.4	4.2		
22		η	3	+61 2050	20 43.3	+61 27	3.5	3.6		4^c.2 Kr. 1805.
23		T		+67 1291	21 8.2	+68 5	variabilis			Ser.IV. $\left.\begin{matrix}5^M.2\\6.8\end{matrix}\right\}-\left\{\begin{matrix}8^M.6\\10.7\end{matrix}\right.$; –Kr.1872.
24		α	5	+61 2111	21 16.2	+62 10	2.7	2.6		
25		β	8	+69 1173	21 27.4	+70 7	3.4	3.3		
26				+59 2395	21 28.2	+60 1	5.7	5.7		
27			9	+61 2169	21 35.2	+61 38	5.0	4.8		
28				+56 2617	21 35.9	+57 2	6.0	5.7		
29		μ		+58 2316	21 40.5	+58 19	variabilis			4^M.?–5^M.? 8^c.4 Kr. 1940.
30		ν	10	+60 2288	21 42.6	+60 40	4.5	4.4		
31				+55 {2638, 2639}	21 48.6	+55 {19, 20}	6.2	5.6		BD. 7^M.5 et 6^M.0.
32			13	+55 2644	21 51.5	+56 8	6.0	6.1		
33			14	+57 2441	21 58.7	+57 31	5.8	5.5		Uranom. Nova: *μ*.
34			15	+59 2456	22 0.6	+59 20	6.9	6.7		

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
35	**Cepheus**	ξ	17	+63° 1802	22^h 0^m.9	+64° 8′	4.5	4.4		
36		ζ	21	+57 2475	22 7.4	+57 42	3.7	3.7		4^c.9 Kr. 1980.
37		λ	22	+58 2402	22 8.1	+58 55	5.3	5.0		
38		ε	23	+56 2741	22 11.3	+56 33	4.4	4.2		
39		δ	27	+57 2548	22 25.5	+57 54	variabilis			3^M.7–4^M.9; – Kr. 2006.*
40		ι	32	+65 1814	22 46.1	+65 40	3.6	3.7		
41		γ	35	+76 928	23 35.2	+77 4	3.4	3.5		
42	**Lacerta**			+50 3602	22 7.3	+50 20	5.6	5.3		
43			2	+45 3894	22 16.9	+46 2	4.7	4.5		
44			3	+51 3358	22 19.6	+51 44	4.6	4.6		4^c.6 Kr. 1998.
45			4	+48 3715	22 20.5	+48 58	4.8	4.6		
46			5	+46 3719	22 25.4	+47 12	4.5	4.7		7^c.0 Kr. 2005.
47			7	+49 3875	22 27.2	+49 46	4.0	3.8		
48			9	+50 3770	22 33.3	+51 51	4.9	4.9		
49				+47 3985	22 52.7	+48 9	5.3	5.2		
50	**Andromeda**	o	1	+41 4664	22 57.3	+41 47	4.0	3.5		
51			3	+49 4028	22 59.7	+49 30	4.8	5.1		
52			7	+48 3964	23 8.0	+48 52	4.7	4.5		
53			8	+48 3991	23 13.1	+48 28	5.0	5.0		7^c.0 Kr. 2087.
54		λ	16	+45 4283	23 32.7	+45 55	4.0	4.1		4^c.0 Kr. 2115.
55		ι	17	+42 4720	23 33.2	+42 43	4.5	4.2		
56		κ	19	+43 4522	23 35.5	+43 47	4.5	4.3		

*) BD. + 57° 2547: 0^m.0, — 1.′5; 7^M.5.

Stellae comparandae:

μ Cephei .	A	.	.	.	30	33	.	.	.	38	39	40	47	
	Be	.	27	.	30	.	35	.	.	38	.	.	.	
	G	.	27	28	30	33	.	36	37	38	.	.	.	et 34
	H	.	.	.	.	.	35	.	.	38	39	40	47	
	P	21	27	28	30	.	35	36	37	38	.	.	47	et 18 19 26
	Sk	21	27	.	30	.	35	36	.	38	.	40	47	et 11 22 41, χ Draconis
	W	.	.	.	.	.	.	.	.	38	39	40	.	
	Y	21	.	.	30	.	35	36	37	38	.	.	.	
	Z	.	.	.	.	.	.	36	.	38	.	40	.	

δ Cephei .	A	.	35	36	.	38	40	.	47	et 29
	Be	30	.	36	.	38	.	.	47	
	G	.	.	36	.	38	.	.	.	
	H	.	35	36	.	38	40	.	47	
	L	.	.	36	.	38	40	.	.	
	O	.	35	36	.	38	40	.	47	
	P	30	35	36	37	38	40	41	47	et 24 25 27
	S	.	35	36	.	38	40	41	47	
	Sb	.	35	36	.	38	40	.	47	
	Sr	.	.	36	.	38	.	.	.	
	St	.	.	36	.	38	.	.	.	
	W	.	35	36	.	38	40	.	.	
	Wg	30	35	36	.	38	40	.	47	et 20
	Y	.	35	36	37	38	.	.	47	
	Z	.	35	36	.	38	40	.	.	

Charta XVII.

8273 β Pegasi; Variatio irregularis.

Num.	Constellatio	Bay.	Fl.	BD.	1900 α	1900 δ	PD.	HP.	UA.	Notae
1	Pegasus	ε	8	+ 9° 4891	21h 39m.3	+ 9° 25′	2.8	2.7	2.3	
2			9	+16 4582	21 39.8	+16 53	4.4	4.3	4.8	
3		κ	10	+24 4463	21 40.1	+25 11	4.3	4.2		
4		ι	24	+24 4533	22 2.4	+24 51	4.1	3.8		
5		ϑ	26	+ 5 4961	22 5.2	+ 5 42	4.1	3.6	3.6	
6		π	29	+32 4352	22 5.5	+32 41	4.5	4.3		
7		ζ	42	+10 4797	22 36.5	+10 19	3.7	3.3	3.5	
8		η	44	+29 4741	22 38.3	+29 42	3.2	3.2		
9		ξ	46	+11 4875	22 41.7	+11 40	4.4	4.3	4.3	
10		λ	47	+22 4709	22 41.7	+23 2	4.2	4.1		
11		μ	48	+23 4615	22 45.2	+24 4	3.9	3.6		
12		β	53	+27 4480	22 58.9	+27 32	variabilis			2M.2–2M.7; 6c.7 Kr. 2066.
13		α	54	+14 4926	22 59.8	+14 40	3.2	2.6		
14		γ	88	+14 14	0 8.1	+14 38	3.3	2.8		
15	Cygnus	μ	78	+28 4169	21 39.7	+28 18	4.7	4.5		
16	Pisces	ϑ	10	+ 5 5173	23 22.9	+ 5 50	4.5	4.5	4.2	
17		ι	17	+ 4 5035	23 34.8	+ 5 5	4.3	4.2	4.1	
18		ω	28	+ 6 5227	23 54.2	+ 6 19	4.3	4.0	4.0	
19	Andromeda	α	21	+28 4	0 3.2	+28 32	2.4	2.1		≡ δ Pegasi, Bay.

Stellae comparandae:

β Pegasi	A	1 8 11 13 14 19	
	Be	. 8 . . 14 .	α et β Aquarii
	H	1 . . 13 . .	
	O	. 8 . 13 . 19	
	P	. 8 11 13 14 19	
	Sr	. 8 . 13 . 19	
	St	. 8	

Charta XVIII.

2583 L^2 **Puppis**; Max.: 2 404 876^d(23. Mart. 1872) + 140^d.2 E.

2852 V **Puppis**; Typus Algol, Periodus: 1^d 10^h 54^m 26^s.7.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	1900 δ	LM.	HP.	UA.	Notae
1	Pictor	α	66	1650	6ʰ 47ᵐ.2	−61° 50′		3ᴹ.3	3ᴹ5	
2	Carina	α	7	1480	6 21.7	−52 38		−1.0	0.4	
3		N	11	1553	32.8	−52 54		4.5	4.8	
4		A	18	1654	47.7	−53 30		4.4	4.8	
5			23	1720	58.4	−51 16		5.0	5.8	r (UA.)
6			44	1926	7 23.8	−50 49		5.0	5.7	
7		Q	50	1996	33.2	−52 19		4.9	5.5	r (UA.)
8		χ	65	2178	54.2	−52 43		3.6	3.7	
9		B	82	2313	8 7.4	−61 0		4.8	5.3	r (UA.)
10		ε	89	2441	20.5	−59 11		1.7	2.1	r (UA.)
11		e¹	95	2544	32.9	−57 53		5.4	5.9	
12		e²	96	2543	33.0	−57 40		4.8	5.4	r (UA.)
13		d	99	2590	38.4	−59 24		4.4	4.7	
14		f	103	2639	44.1	−56 24		4.6	5.1	
15		c	108	2706	52.8	−60 16	4.1	4.0	4.0	
16		b¹	109	2717	54.6	−58 51		5.1	5.4	(UA.) { 5 1/2, 7 1/4
17		b²	110	2737	57.0	−58 42		5.2	5.7	r (UA.)
18		a	117	2808	9 8.3	−58 33	3.9	3.5	3.8	
19		ι	127	2868	14.4	−58 51		2.2	2.5	
20	Puppis		16	{ 1520, 1521	6 27.4	−50 10		5.3	{ 8.5, 5.5	
21		ν	20	1569	34.7	−43 6		3.2	3.5	c (UA.)*
22			21	1583	36.0	−48 8		5.0	5.3	c (UA.) { 7 3/4, 5 3/4
23			38	1648	47.1	−46 31		5.1	5.4	
24		τ	39	1653	47.5	−50 30	3.2	2.8	3.2	r (UA.)
25			47	1685	53.6	−48 35		4.9	5.5	r (UA.)
26			50		55.1	−45 58			6.9	
27			51		55.8	−45 38			6.6	
28			52		56.2	−46 53			6.9	
29			57		59.2	−43 15			6.8	
30		C	59	1738	7 0.9	−42 11	5.6	5.2	5.5	
31			60	1739	0 9	−43 28	5.7	5.5	5.8	(UA.) { 5.9, 7.4
32		H	61	1742	1.3	−49 26	5.4	5.2	5.3	
33			65		3.3	−43 27			6.8	

* Decidedly blue (UA.)

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	1900 δ	LM.	HP.	UA.	Notae
34	**Puppis**		66	1765	$7^h\ 3^m.8$	$-40^0\ 44'$		$6^M.0$	$6^M.2$	
35		**A**	67	1775	5.5	−39 30		4.9	5.3	
36			68	1793	8.1	−48 46	5.7	5.1	5.6	r (UA.)
37		**E**	70	1799	9.0	−40 20		5.5	5.7	
38		**I**	71	1805	9.7	−46 36	4.8	4.5	4.8	
39		L^1	72	1813	10.2	−45 0	5.2	5.1	5.3	var.? (UA.)
40		L^2	73	1815	10.5	−44 29		variabilis		$3^{1/2\,M}-6^{1/2\,M}$
41			76		11.7	−41 15			6.3	
42			77	1825	11.9	−46 40	6.1	5.8	6.2	
43			78	1826	11.9	−48 6	5.1	4.9	5.0	
44			81	1842	13.4	−46 36	6.1	5.6	6.1	r (UA.)
45		π	82	1845	13.6	−36 55	(2.6)	2.5	2.7	var. $^1/_2{}^M$? r (UA.)
46		v^1	83	1856	14.8	−36 33		4.8	5.3	
47			85	1859	15.0	−43 48		6.0	6.3	
48		v^2	84	1860	15.1	−36 34		5.3	5.4	
49		**F**	87	1861	15.1	−39 2		5.3	5.8	r (UA.)
50		y	98	1946	25.6	−38 36		5.6	5.9	
51		σ	99	1951	26.1	−43 6	3.7	3.0	3.5	r (UA.)
52			130	2002	33.9	−48 36		5.9	6.1	
53			142	2017	35.5	−48 22		5.6	6.0	
54		d^1	143	2021	35.9	−38 5		5.1	5.4	triplex *.
55			159	2054	39.9	−44 55		5.1	5.6	r (UA.)
56			162	2059	40.3	−40 41		5.1	5.7	r (UA.)
57		c	175	2075	41.7	−37 44		3.4	3.6	in cumulo (UA.) **.
58			187	2094	44.5	−46 22		5.3	5.9	
59		**Q**	196	2102	45.4	−46 49	5.3	4.7	5.1	r (UA.)
60		**P**	199	2108	46.2	−46 7	4.4	4.1	4.3	
61			208	2120	47.7	−50 15		5.8	6.4	
62		a	213	2129	48.8	−40 19	4.1	3.7	4.0	r (UA.)
63		b	214	2134	49.1	−38 36		4.7	4.9	
64			216	2142	50.2	−49 21	5.0	4.8	5.0	
65		**J**	218	2143	50.4	−47 51	4.6	4.3	4.5	
66			227	2172	{ 53.7 53.9	−43 14 −43 13 }		5.6	5.9	(UA.) { 6 $7^1/_4$
67		**N**	228	2176	54.1	−43 50		5.2	5.7	r (UA.)
68		**O**	231	2184	54.7	−45 18		5.1	5.6	r (UA.)
69		**V**	233	2190	55.4	−48 58		variabilis		4^M-5^M
70			{ 236 237	2206 2207 }	56.4	−49 42	5.9	6.0	6.2	(UA.) { $6^3/_4$ 7
71		ζ	248	2248	8 0.1	−39 43	(2.4)	2.3	2.5	
72		h^1	267	2318	7.8	−39 19		4.3	4.8	r (UA.)
73			268	2321	8.1	−42 41		4.8	5.3	var.? (UA.)
74		h^2	279	2350	10.5	−40 3		4.3	4.8	
75	**Vela**		1	2259	8 1.9	−50 18		6.0	6.6	r (UA.)
76			3	2277	3.5	−44 59		4.8	5.7	c (UA.)
77			6	2298	6.2	−48 23		5.9	6.2	r (UA.)
78			7	2300	6.3	−43 50		5.2	5.9	
79			8	2303	6.4	−47 4		4.9	$6^1/_4$	
80		γ	9	2305	6.4	−47 3		1.9	3	cumulus (UA.)
81			10	2309	6.7	−47 39		5.4	5.9	
82			15	2351	10.5	−46 41		5.3	5.8	
83			16	2353	10.7	−49 54		5.4	6.0	r (UA.)

* d^2& d^3, $5^M.9$ & $6^M.0$ (HP.); $6^M.6$ & $6^M.5$ (UA.)

** (UA.) deep orange. NGC. 2451.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	1900 δ	LM.	HP.	UA.	Notae
84	**Vela**	**B**	26	2433	8h 19m.5	−48° 10′		4M.8	5M.4	
85		**F**	30	2482	24.9	−52 45	.	5.1	5.7	
86		**A**	33	2490	25.9	−47 36		5.5	6.0	
87			34	2491	26.1	−44 23		5.2	5.5	(UA.) { 7 3/4, 6 1/4
88		**C**	46	2536	31.7	−49 36		4.9	5.6	r (UA.)
89		e	48	2554	34.1	−42 38		4.1	4.6	
90		b	53	2582	37.3	−46 18		3.7	4.1	
91		o	56	2583	37.4	−52 34		3.6	4.0	cumulus (UA.)
92		n	58	2584	37.9	−46 58		4.8	5.2	r (UA.)
93	{		61	2599	39.5	−52 44		5.7	6.6	} 5M.7 (UA.)
			62	2600	39.6	−52 45		5.0	6.3	
94		**D**	63	2613	40.5	−49 28		5.2	5.8	
95		d	64	2614	40.8	−42 17		4.0	4.4	
96		δ	65	2623	41.9	−54 20		2.0	2.2	
97		a	66	2629	42.6	−45 41		4.0	4.1	
98		g	76	2659	46.3	−44 56		4.9	5.7	
99		f	78	2670	47.2	−46 9		5.2	5.6	
100		**H**	88	2707	53.3	−52 20		4.7	5.4	

Stellae comparandae:

L² Puppis	Goetz	. . . 31 . . 38 39 42 . . . . . 51 57 . 60 62 . 65 . .
	Markwick	. . . . . 36 38 39 . 43 . . 47 . 51 . 59 60 . 64 65 69 .
	Roberts	. 24 30 31 32 36 38 39 42 43 44 45 . . 51 . . 60 62 . 65 . 71
	UA.	8 . . . . 49; et z (115) Puppis

V Puppis	Goetz	7 55 . . 64 65 . 84 88
	Roberts	. . 59 60 64 65 70 . .

Charta XIX.

3409 N **Velorum;** Periodus brevis.

3418 R **Carinae;** Max.: 2 404 653ᵈ (13. Aug. 1871) + 309ᵈ.5 E (Inaeq. period.).

3495 l **Carinae;** Max.: 2 404 637ᵈ.4 (28. Jul. 1871) + 35ᵈ.520 E.

3847 η **Carinae;** Nova.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	1900 δ	LM.	HP.	UA.	Notae
1	**Volans**	ε	22	2314	8ʰ 7ᵐ.6	−68° 19′		4ᴹ.4	4ᴹ.5	
2			24	2413	17.2	−65 18		5.0	5.7	r (UA.)
3		β	29	2481	24.7	−65 48		3.6	3.9	c (UA.) *
4		α	46	2762	9 0.9	−66 0		4.1	4.2	
5	**Carina**	ε	89	2441	8 20.5	−59 11		1.7	2.1	r (UA.)
6		e¹	95	2544	32.9	−57 53		5.4	5.9	
7		e²	96	2543	33.0	−57 40		4.8	5.4	r (UA.)
8		d	99	2590	38.4	−59 24		4.4	4.7	
9		f	103	2639	44.1	−56 24		4.6	5.1	
10		c	108	2706	52.8	−60 16	4.1	4.0	4.0	
11		b¹	109	2717	54.5	−58 51		5.1	5.4	(UA.) { $5^1/_2$ $7^1/_4$
12		b²	110	2737	57.0	−58 42		5.2	5.7	r (UA.)
13		E	115	2787	9 4.8	−70 8		4.8	5.2	
14		a	117	2808	8.3	−58 33	3.9	3.5	3.8	
15		i	119	2814	9.0	−61 54	4.4	4.2	4.3	
16			121	2823	10.3	−59 0		5.6	6.1	r (UA.)
17		β	123	2844	12.1	−69 18		1.7	2.0	
18		g	125	2857	13.4	−57 6	5.3	4.2	4.8	var.? rr (UA.)
19		ι	127	2868	14.4	−58 51		2.2	2.5	
20		k	132	2903	18.5	−61 59	5.6	4.8	5.5	r (UA.)
21			134		21.6	−61 13	6.6		6.4	
22			135		23.0	−61 31	6.2		6.3	
23			137		24.6	−64 30			6.6	n Car. (Lac.)
24			139		26.3	−61 50	6.7		6.5	r (UA.)
25			140		27.0	−61 55	7.0		7.0	
26		R	145	(3004)	29.7	−62 21		variabilis		4ᴹ.5–10ᴹ.0 **
27		h	147	3020	31.5	−58 47	4.7	4.2	4.9	
28		m	150	3053	36.6	−60 53	4.9	4.6	5.1	
29			151		37.1	−62 29	6.8		6.9	
30			152	3060	37.6	−57 32		5.4	6.0	
31		l	157	3084	42.5	−62 3		variabilis		3ᴹ.6–5ᴹ.0

* UA. bright yellow.

** CGA. orange.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	δ	LM.	HP.	UA.	Notae
32	**Carina**	υ	160	3095	$9^h 44^m.6$	−64° 36′	$3^M.1$	$3^M.0$	$3^M.4$	(UA.) { 3½ / 7½
33			162	3124	48.1	−62 17	6.4	5.6	6.2	
34			176	3232	10 5.9	−65 20	6.0	5.4	5.7	r (UA.)
35		S	177		6.2	−61 4		variabilis		$5^M.8-9^M.0$
36		M	184	3266	10.7	−65 53	5.7	5.4	5.7	
37		ω	185	3274	11.4	−69 32		3.6	3.6	
38		q	187	3293	13.7	−60 50		3.4	3.3	var.? r (UA.)
39		L	191	3344	20.0	−66 24	5.5	5.4	5.4	
40			195	3369	23.7	−57 8		4.9	5.4	
41		s	196	3374	24.2	−58 14		4.0	4.6	r (UA.)
42		p	203	3406	28.5	−61 10	3.6	3.6	3.6	
43		r	208	3428	31.7	−57 2		4.6	5.3	r (UA.)
44			209	3429	32.0	−57 42			5.7	Cum. NGC. 3324.
45		t^1	210	3432	32.6	−59 3		5.3	5.5	var. r (UA.)
46		t^2	213	3452	34.9	−58 40		4.7	5.2	(UA.) { 5½ / 7½ *
47			221	3472	38.7	−63 57		5.2	5.7	
48			222	3474	38.8	−58 42		5.5	6.5	var.? r (UA.)
49		θ	223	3476	39.4	−63 52		3.0	2.9	
50		w	224	3477	39.7	−60 3		4.4	5.2	r (UA.)
51			229	3482	40.5	−63 26		5.1	5.6	r (UA.)
52		η	231	3485	41.2	−59 10		variabilis		$> 1^M-7^M.5$ **
53			237	3498	42.9	−63 44		5.4	6.2	
54			238	3502	43.2	−63 51		5.0	5.8	Cum.
55			244	3547	48.4	−56 43		5.7	6.0	
56		u	246	3556	49.4	−58 19		3.8	4.1	r (UA.)
57		T	249	3570	51.3	−59 59		variabilis		$6^M.7-7^M.0$, r (UA.)
58		U	250		53.7	−59 12		variabilis		$6^M.8-8^M.0$
59			256	3659	11 2.2	−58 8		6.0	6½	Cum. NGC. 3532
60		z	257	3662	2.4	−61 53		4.8	5.3	r (UA.)
61		ϰ	260	3678	4.3	−58 26		4.0	4.6	c (UA.)
62			261	3679	4.4	−61 24		5.5	6.0	
63		y	263	3716	8.3	−59 46		4.7	5.2	
64	**Vela**	δ	65	2623	8 41.9	−54 20		2.0	2.2	
65			114	2834	9 11.3	−55 9		5.2	6.0	r (UA.)
66		K	122	2870	14.8	−50 38		5.3	5.8	c (UA.)
67			128	2907	18.8	−55 4		5.7	6.4	
68		ϰ	129	2911	19.0	−54 35		2.6	2.7	
69		I	136	2938	23.0	−52 57		5.2	5.8	
70		N	144	2996	28.2	−56 36		variabilis		$3^M.4-4^M.4$?
71		L	146	3011	30.7	−50 49		5.2	5.5	
72		M	148	3030	33.3	−48 54		4.4	4.9	
73			150	3032	33.9	−53 13		5.5	6.0	
74		O	154	3069	40.3	−53 26		5.7	5.8	
75		φ	171	3155	53.4	−54 5		3.7	3.9	c (UA.)
76		Q	186	3224	10 5.2	−51 19		5.2	5.3	
77			201	3308	15.9	−54 32		4.5	5.4	r (UA.)
78		J	203	3317	17.2	−55 32		4.4	5.0	(UA.) { 5 / 8½

*) UA. orange red.

**) Nova Carinae (etiam: η Argus). Cum NGC. 3372.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	δ	LM.	HP.	UA.	Notae
79	**Vela**		209	3366	$10^h 23^m.0$	−54° 22′		$5^M.5$	$6^M.2$	r (UA.)
80			215	3394	27.5	−53 13		5.1	5.6	(UA.) {5 3/4, 8 1/2}
81		p	222	3436	33.1	−47 42		4.0	4.1	
82		x	225	{ 3454 (3455)	35.3 35.4	−47 42 −55 5		4.4 6.6	5 7 1/2	} 4.8 (UA.)
83		μ	229	3495	42.5	−48 53		2.8	2.9	
84			230	3499	42.9	−56 14		5.5	5.8	
85	**Centaurus**	π	24	3774	11 16.4	−53 57		4.4	4.3	
86			33	3802	22.1	−60 34		5.6	6.2	
87		o^1	37	3840	27.1	−58 53		4.9	5.2	
88		o^2	38	3841	27.2	−58 58		5.3	5.5	
89		A	42	3871	30.0	−53 43		4.8	5.2	
90		λ	46	3883	31.2	−62 28		3.3	3.4	
91			52	3893	32.4	−60 44		5.2	5.9	
92			54	3905	33.5	−61 16		5.4	6.0	
93			58	3927	36.2	−61 32		4.8	5.7	r (UA.)
94			61	3949	38.8	−61 56		5.2	5.8	
95			65	3966	41.7	−60 37		4.3	4.7	
96		j	69	3987	44.8	−63 14		4.6	4.9	
97	**Musca**	λ	15	3963	11 40.9	−66 10		3.8	3.8	
98		μ	16	3978	43.4	−66 16		4.7	5.3	rr (UA.) *
99			17	3990	45.2	−69 40		4.9	5.6	r (UA.)
100			18	4001	47.0	−64 39		5.1	5.5	
101		ε	35	4147	12 12.0	−67 24		4.2	4.7	var.? r (UA.)
102		ζ^2	38	4176	16.6	−66 58		5.3	5.8	
103		α	45	4270	31.3	−68 35		2.9	2.9	
104		β	51	4312	40.1	−67 34		3.3	3.4	
105	**Crux**	θ^1	6	4059	11 57.9	−62 45		4.5	4.7	
106		θ^2	7	4066	59.2	−62 37		4.9	5.3	
107		η	10	4083	12 1.7	−64 4		4.3	4.7	
108		δ	18	4134	9.8	−58 12		3.1	3.4	
109		ζ	19	4153	13.0	−63 27		4.2	4.6	
110		ε	22	4173	16.0	−59 51		3.5	4.0	rr (UA.)
111		α {	26 27	4208 4209	} 21.0	−62 33		1.0	1 1/2 1 3/4	} $1^M.3$ (UA.)
112		γ	34	4242	25.6	−56 33		1.6	2.0	**
113		β	46	4324	41.9	−59 9		1.5	1.7	

* UA. intense orange red.
** CGA. orange.

Charta Specialis.

3847 η Carinae.

Num.	Constellatio	Bay.	CC.*)	CGA.	$\Delta\alpha$	$\Delta\delta$	CGA.	HP.	UA.	Notae **)
45	Carina	t_1		14504	$-8^{m}.6$	$+7'$		$5^{M}.3$	$5^{M}.5$	UA. 210, r var.
114				508	−8.4	+29	$7^1/_4$			L 4383
115				528	−7.5	+57			6.5	UA. 211
46		t_2		558	−6.2	+30		4.7	5.2	UA. 213
116				561	−6.2	+25	$7^1/_2$			L 4397
117				566	−6.0	+52	6.8			L 4401
118			16	623	−3.8	−18			7.5	L 4420
119			19	626	−3.7	0			6.9	UA. 220 var.?
48			46	656	−2.4	+28		5.5	6.5	UA. 222, r var.?
50		w		673	−1.4	−53		4.4	5.2	UA. 224, r
120			79	684	−1.1	−26			7.0	UA. 226 cum.
121			80	686	−1.1	+ 8	7			L 4449
122			101	698	−0.6	−19			6.8	UA. 227 cum.
123			117	717	−0.3	+ 7			7.6	G 1332
52		η	122	720	∓0.0	0		variabilis		UA. 231
124			138	741	+0.6	+17			7.4	B 3202
125			139	744	+0.8	+12			7.5	B 3204, r
126			148	754	+1.3	−55	7			L 4464
127			174	788	+2.6	−11			7.0	UA. 239 var.?
128			177	797	+3.0	−14			6.7	UA. 240
129			186	811	+3.5	−32	$7^3/_4$			B 3236
130			197	827	+4.3	+22			6.7	UA. 243
131			214	850	+5.8	−16	7			B 3248
132				902	+8.1	+48	6.9			B 3272
56		u		14910	+8.2	+50		3.8	4.1	UA. 246, r

*) Catalogus Cumulorum, CGA. pag. 625.
**) Desumptae ex CGA. et UA.

Stellae comparandae:

N Velorum	UA.	15 32 37
R Carinae	Goetz	. 10 . 15 . 20 . . . . . 25 27 28 . . . . . .
	Innes	8 . . 15 . 20 . . 23 . . 27 . . . .
	Roberts	. 10 14 15 . 20 21 22 . 24 25 27 28 29 33 34 36 39
	UA.	. . . . . 18 . . . . 27 . . . . . 36 39
l Carinae	Goetz	10 14 15 . 20 . 28 . . 38 .
	Roberts	10 14 15 18 . 27 28 32 . . 42
	UA.	10 . . 18 . . . . . 37 . 42 et χ Carinae (65)
η Carinae	Innes	(MN. v. 59 p. 570) . . . . . . 123 et CC. 121 (8^{M}) = CPh. 1112 (9^{M})
	Markwick	. . . . 123 124 125
	Tebbutt	45 46 48 50 115 117 . 119 . . . . . . (MN. v. 28 p. 266)
	UA.	. . 48 . 115 . 118 119 120 122 123 124 125 127 128 130 (UA. p. 256)

Charta XX.

5013 θ Apodis } Variatio ignota.
5319 R Apodis }

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	1900 δ	LM.	HP.	UA.	Notae
1	**Carina**	**I**	193	3359	$10^h 22^m.4$	−73° 31′		$4^M.0$	$4^M.4$	var. ? (UA.) *
2		**K**	202	3399	27.8	−71 29		4.9	5.0	
3			204	3408	28.7	−72 42		4.8	5.6	c (UA.)
4	**Chamaeleon**	γ	23	3446	10 34.3	−78 5		4.1	4.4	
5		δ^1	25	3510	44.3	−79 57		5.5	6.2	} $4^M.5$ (UA.)
6		δ^2	26	3517	44.8	−80 1		4.6	4.9	}
7		π	32	3900	11 33.1	−75 21		5.7	6.2	
8			33	3938	37.6	−82 33		6.2	6.7	
9		ε	37	4039	54.7	−77 40		5.1	4.9	(UA.) { 5.0 / 7.1
10		ϰ	38	4069	59.6	−75 58		4.9	5.6	r (UA.)
11		β	40	4148	12 12.5	−78 45		4.3	4.6	
12			48		13 24.6	−77 3			6.6	
13			49	(4592)	30.6	−75 10		6.6	6.3	
14	**Musca**	λ	15	3963	11 40.9	−66 10		3.8	3.8	
15		μ	16	3978	43.4	−66 15		4.7	5.3	rr (UA.)
16			17	3990	45.2	−69 40		4.9	5.6	r (UA.)
17			18	4001	47.0	−64 39		5.1	5.5	
18		**S**	30		12 7.4	−69 36	**variabilis**			**$6^M.4-7^M.3$**
19		ε	35	4147	12 12.2	−67 24		4.2	4.7	var. ? r (UA.)
20		ζ^2	38	4176	16.6	−66 58		5.3	5.8	
21		γ	44	4247	26.5	−71 35		4.0	4.0	
22		α	45	4270	31.2	−68 35		2.9	2.9	
23		**R**	49	(4295)	36.0	−68 52	**variabilis**			**$6^M.5-7^M.6$**
24			50		38.9	−68 17			6.9	
25		β	51	4312	40.1	−67 34		3.3	3.4	
26		δ	54	4402	55.4	−71 1		3.6	3.7	UA. 55, $6^M.6$, $+55^s$, $+4'$
27		η	59	4470	13 8.5	−67 22		4.9	5.3	
28			62	4480	10.5	−66 15		4.8	5.5	r (UA.)
29		ι^1	66	4522	17.2	−74 22		4.9	5.6	r (UA.)
30		ι^2	68		19.4	−74 10			6.8	
31	**Crux**	θ^1	6	4059	11 57.9	−62 45		4.5	4.7	
32		θ^2	7	4066	59.2	−62 37		4.9	5.3	
33		η	10	4083	12 1.7	−64 3		4.3	4.7	
34		δ	18	4134	9.8	−58 12		3.1	3.4	
35		ζ	19	4153	13.0	−63 27		4.2	4.6	
36			20		14.5	−62 18			7.0	
37		**T**	21		15.9	−61 44	**variabilis**			**$6^M.8-7^M.6$**

* UA. 194, $6^M.5$, $+19^s+3'.5$.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	δ	LM.	HP.	UA.	Notae
38	**Crux**	ε	22	4173	12ʰ 16ᵐ.0	−59° 51′		$3^{\mathrm{M}}.5$	$4^{\mathrm{M}}.0$	
39		**R**			18.1	−61 4		variabilis		$6^{\mathrm{M}}.8$–$7^{\mathrm{M}}.9$
40		α	{ 26 { 27	4208 4209	21.0	−62 33		1.0	1.3	(UA.) { 1 1/2 { 1 3/4
41		γ	34	4242	25.6	−56 33		1.6	2.0	c (UA.) *
42			39	4297	36.2	−59 8		5.0	6.0	
43		ι	44	4310	39.7	−60 26		4.7	5.7	r (UA.)
44			45	4317	40.6	−55 56		4.9	5.4	
45		β	46	4324	41.9	−59 9		1.5	1.7	
46		**S**			48.4	−57 53		variabilis		$6^{\mathrm{M}}.5$–$7^{\mathrm{M}}.6$
47		λ	51	4365	48.7	−58 36		4.8	5.6	
48		μ	{ 52 { 53	4367 4366	48.7	−56 38		{4.3 {5.4	4.4} 5.5}	$4^{\mathrm{M}}.1$ (UA.)
49	**Centaurus**	j	69	3987	11 44.8	−63 14		4.6	4.9	
50			191	4467	13 8.1	−58 34		5.0	5.9	
51		J	{207 {208	4514 4515	16.2 16.2	−60 27 −60 28		6.6 4.6	6.5 5.2	
52		m	214	4521	17.3	−64 1		4.4	5.2	UA. 215, $6^{\mathrm{M}}.4$, $+1^{\mathrm{m}}.3$, +3′.
53			294	4724	50.4	−63 12		4.8	5.7	
54		β	304	4753	56.8	−59 53		0.8	1.2	
55		**R**	331	4826	14 9.4	−59 27		variabilis		$5^{\mathrm{M}}.6$–$11^{\mathrm{M}}.8$?
56			334	4843	12.5	−60 49	5.6	5.2	5.9	c (UA.)
57		v	336	4848	13.3	−55 56	5.0	4.4	5.0	
58			340	4858	15.5	−58 0	5.4	5.0	5.6	(UA.) { 6 { 7 3/4
59		**V**			25.4	−56 27		variabilis		$6^{\mathrm{M}}.4$–$7^{\mathrm{M}}.8$
60		α	{363 {364	4960 4961	32.8	−60 25		0.2	0.7	(UA.) { 1 { 3 1/2
61			365		33.3	−56 1			6.7	
62	**Apus**		3		13 50.2	−78 6			6.5	
63		θ	4	4749	55.6	−76 19		variabilis		$5^{\mathrm{M}}.5$–$6^{\mathrm{M}}.6$
64			5		59.3	−74 23			6.4	
65		η	6	4806	14 5.7	−80 32		5.0	5.3	
66			7		6.4	−77 12			6.9	
67		ε	9	4832	10.3	−79 39		5.3	5.5	
68			10		10.6	−73 30			6.7	
69			11		19.0	−76 17			6.5	
70			12		30.9	−76 35			6.7	
71		α	14	4976	35.4	−78 37		3.8	4.0	
72			15		40.0	−76 45			6.7	
73			17	5023	43.2	−72 47		5.6	6.1	
74		**R**	18	5042	46.5	−76 15		variabilis		r (UA.) $5^{\mathrm{M}}.5$–$6^{\mathrm{M}}.2$?
75			19		48.4	−76 45			6.4	
76			20		49.1	−74 38			6.5	
77		$\varkappa^{1}$	29	5263	15 20.6	−73 3		5.6	5.8	
78		$\varkappa^{2}$	33	5313	29.3	−73 {7 {8		5.8	5.9	(UA.) { 6 { 7 3/4
79			34		29.6	−75 45			6.3	
80			38	5481	54.8	−72 8		5.7	6.1	
81		δ	{ 40 { 41	5549 5551	16 5.4 5.5	−78 27 −78 25		4.7 5.2	5.2 5.5	r (UA.) r (UA.) } $4^{\mathrm{M}}.6$ (UA.)
82		γ	44	5631	18.1	−78 40		3.9	3.9	

* CGA. orange.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	δ	LM.	HP.	UA.	Notae
83	Apus	β	47	5690	16h 28m.8	−77° 18′		4M.2	4M.5	r (UA.)
84	Octans	δ	19	4837	14 10.9	−83 13		4.1	4.7	
85	Circinus	α	17	4969	14 34.4	−64 32		3.4	3.5	
86		ε	43	5188	15 9.2	−63 14		4.8	5.5	*
87		β	44	5193	9.7	−58 26		4.0	4.7	
88		γ	47	5229	15.4	−58 58		4.4	5.2	
89	Triang. Austr.	T	1		15 0.4	−68 20	variabilis			6M.9–7M.4
90		γ	5	5194	9.6	−68 19		3.0	3.1	
91		R	6	5202	10.8	−66 8	variabilis			6M.7–7M.4
92			7		11.5	−67 7			6.6	
93		ε	11	5305	27.6	−65 59		4.1	4.6	r (UA.)
94		β	17	5416	46.3	−63 7		3.1	3.1	
95		S	21		52.2	−63 29	variabilis			6M.4–7M.4
96		δ	25	5555	16 6.3	−63 26		4.0	4.3	r (UA.)
97		ζ	31	5625	17.7	−69 52		5.0	5.6	
98		α	42	5752	38.1	−68 51		1.9	2.2	r (UA.)

* CGA. yellow.

Stellae comparandae nullibi assignantur.

Charta XXI.

6760 χ Pavonis; Max.: 2 404 765$\overset{d}{.}$3 (3. Dec. 1871) +9$\overset{d}{.}$0914 E.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	1900 δ	LM.	HP.	UA.	Notae
1	Triang. Austr.	T	1		15h 0m.4	−68° 20′		variabilis		$6\overset{M}{.}9$–$7\overset{M}{.}4$
2		γ	5	5194	9.6	−68 19		$3\overset{M}{.}0$	$3\overset{M}{.}1$	
3		R	6	5202	10.8	−66 8		variabilis		$6\overset{M}{.}7$–$7\overset{M}{.}4$
4			7		11.5	−67 7			6.6	
5		ε	11	5305	27.6	−65 59		4.1	4.6	r (UA.)
6		β	17	5416	46.3	−63 7		3.1	3.1	
7		S	21		52.2	−63 29		variabilis		$6\overset{M}{.}4$–$7\overset{M}{.}4$
8		δ	25	5555	16 6.3	−63 26		4.0	4.3	r (UA.)
9		ζ	31	5625	17.7	−69 52		5.0	5.6	
10		α	42	5752	38.1	−68 51		1.9	2.2	r (UA.)
11	Norma	ι¹	28	5486	15 55.4	−57 30		4.8	5.4	
12		ι²	36	5516	16 1.1	−57 40		5.8	6.0	
13			41	5563	7.6	−57 39		5.8	6.0	
14		γ¹	46	5578	9.5	−49 49		5.0	5.4	
15		S	47		10.6	−57 39		variabilis		$6\overset{M}{.}6$–$7\overset{M}{.}6$
16		γ²	49	5593	12.4	−49 55		4.2	4.6	
17			55	5639	19.8	−58 22		5.8	6.1	
18		ε	56	5640	19.8	−47 20		4.7	4.8	(UA.) 7
			57	5641						5
19			58		21.4	−57 32			6.6	r (UA.)
20	Apus	δ	40	5549	5.4	−78 27		4.7	5.2	r (UA) } $4\overset{M}{.}6$ (UA.)
			41	5551	5.5	−78 25		5.2	5.5	r (UA.) }
21		γ	44	5631	18.1	−78 40		3.9	3.9	
22		β	47	5690	28.8	−77 18		4.2	4.5	r (UA.)
23		ζ	60	5980	17 11.5	−67 40		4.7	5.4	
24	Ara	R			16 31.4	−56 48		variabilis		$6\overset{M}{.}8$–$7\overset{M}{.}9$
25		η	13	5767	41.1	−58 52		3.6	3.8	c (UA.)
26		ζ	23	5837	50.3	−55 50		3.0	3.2	r (UA.)
27		ε¹	25	5844	51.6	−53 0		4.2	4.2	
28		ε²	31	5872	55.2	−53 5		5.4	5.9	
29		γ	50	6021	17.0	−56 17		3.4	3.6	
30		β	51	6020	17 17.0	−55 26		2.7	2.8	r (UA.)
31		δ	60	6056	22.1	−60 36		3.8	3.7	
32		α	62	6064	24.1	−49 48		2.9	2.9	
33		σ	67	6093	28.2	−46 26		4.5	5.5	
34		λ	71	6124	32.7	−49 21		4.8	5.6	r (UA.)
35		θ	84	6338	58.8	−50 6		3.8	3.9	
36	Scorpius	ζ¹	103	5809	16 46.9	−42 12		5.0	5.8	c (UA.)
37		ζ²	104	5815	47.6	−42 11		3.5	3.6	r (UA.)
38			125	5924	17 3.5	−44 26		4.9	5.7	

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	δ	LM.	HP.	UA.	Notae
39	**Scorpius**	η	126	5930	$17^{h}\ 5^{m}.0$	−43° 6′		$3^{M}.4$	$3^{M}.6$	
40			146	6019	17.0	−44 4		5.0	5.8	
41		υ	152	6063	24.0	−37 13		2.8	3.2	
42		λ	156	6082	26.8	−37 2		1.8	2.0	
43		θ	160	6104	30.1	−42 56		2.0	2.1	r (UA.)
44		ϰ	165	6154	35.6	−38 59		2.6	2.6	
45		ι^1	169	6191	40.6	−40 5		3.1	3.3	
46		G	172	6204	43.0	−37 1		3.2	3.4	
47		ι^2	173	6205	43.2	−40 3		4.9	5.6	
48			181	6264	49.5	−44 19		4.9	5.4	
49			183	6276	50.7	−41 42		4.7	5.3	r (UA.)
50	**Pavo**	η	2	6155	17 35.9	−64 41	3.8	3.5	3.8	
51		π	16	6339	59.0	−63 40	4.7	4.4	4.6	
52		ι	17	6355	18 1.1	−62 1		5.4	5.8	
53			21	6400	6.2	−63 5		5.6	6.0	r (UA.)
54		ξ	26	6442	14.0	−61 32	5.0	4.2	4.4	r (UA.)
55		ν	33	6499	22.0	−62 20	4.9	4.8	4.8	(UA.) { 5, 7 3/4 }
56		ζ	35	6557	31.4	−71 31	4.3	4.0	4.2	r (UA.)
57		{	37	6564	32.6	−64 44		6.4	6.9	
			38	6566	33.9	−64 39		5.8	6.2	r (UA.)
58			39	6572	35.6	−64 58	5.3	4.8	5.3	
59		θ	43	6594	38.8	−65 11		5.9	6.1	
60		λ	45	6617	43.0	−62 18	4.4	4.4	4.3	
61		ϰ	46	6640	46.6	−67 22		variabilis		$3^{M}.8$ - $5^{M}.2$
62		ω	51	6650	49.7	−60 20		5.1	5.4	r *
63			52	6668	52.8	−68 54		5.9	6.1	
64			56	6703	59.3	−68 35	5.7	5.2	5.7	
65			57	6723	19 2.0	−60 9		cum.	5.8	neb. (UA.) NGC. 6752.
66			60	6754	7.2	−66 50		5.6	5.6	
67			70	6916	37.9	−72 45		5.5	5.7	
68			80	6954	48.7	−59 10		5.3	5.5	
69		ε	78	6957	49.0	−73 10		4.0	4.0	**
70		μ^1	82	6966	50.7	−67 13		5.7	5.9	
71		μ^2	83	6969	52.1	−67 13		5.2	5.6	r (UA.)
72			85	6979	53.3	−59 39		4.9	5.7	c (UA.) ***
73		δ	88	7006	58.8	−66 26		3.6	3.5	r (UA.)
74		α	99	7074	20 17.7	−57 3		2.0	2.1	
75		φ^1	104	7113	27.3	−60 55		4.7	4.9	
76		ϱ	107	7121	29.2	−61 52		5.0	4.9	var.? (UA.)
77		φ^2	109	7134	31.7	−60 53		5.2	5.5	r (UA.)
78		υ	110	7137	32.9	−67 7		5.3	5.6	var.? (UA.)
79		β	111	7150	36.0	−66 34		3.5	3.3	
80		γ	128	7320	21 18.2	−65 49		4.2	4.5	
81	**Telescopium**	ε	3	6374	18 3.8	−45 58		4.5	5.2	r (UA.)
82		α	13	6484	19.6	−46 1		3.7	3.5	
83		ζ	14	6491	21.1	−49 7		4.0	4.5	r (UA.)
84		δ^1	16	6510	24.4	−45 59		5.1	5.7	
85		δ^2	17	6513	24.6	−45 50		5.3	5.7	

* $7^{M}.4$, $+1^{m}.6$, −0′.5 (UA.).

** UA. blue, $3^{M}.6$–$4^{M}.2$.

*** CGA. orange.

Num.	Constellatio	Bay.	UA.	SMP.	1900 α	δ	LM.	HP.	UA.	Notae
86	**Telescopium**	κ	31	6624	$18^h 44^m.7$	−52° 13′		$5^M.2$	$5^M.7$	r (UA.)
87		λ	41	6656	50.5	−53 4		4.9	5.2	
88		ϱ	45	6696	58.4	−52 29		5.0	5.7	
89		η	55	6792	19 14.8	−54 37		5.0	5.4	
90		ι	64	6857	27.8	−48 19		5.0	5.4	
91	**Corona Austr.**	θ	15	6523	18 26.4	−42 23		4.4	5.1	
92		ζ	39	6683	56.0	−42 14		4.8	5.2	
93		δ	43	6716	19 1.4	−40 39		4.4	5.0	c (UA.)
94	**Sagittarius**	β^1	{168 169	6797 6798}	19 15.5	−44 39		4.1	3.8	(UA.) {4 6 3/4
95		β^2	172	6803	16.0	−44 59		4.4	4.4	
96		α	177	6805	17.0	−40 48		4.1	4.0	

Stellae comparandae:

κ Pavonis	Goetz	. . . 55 56 58 . 60 .
	Moeller	. 51 54 55 56 . 59 60 . (AN. 3960)
	Roberts	50 51 54 55 56 58 . 60 64

Charta I.

209 *α* **Cassiopeiae,** Magn.: 2—3.



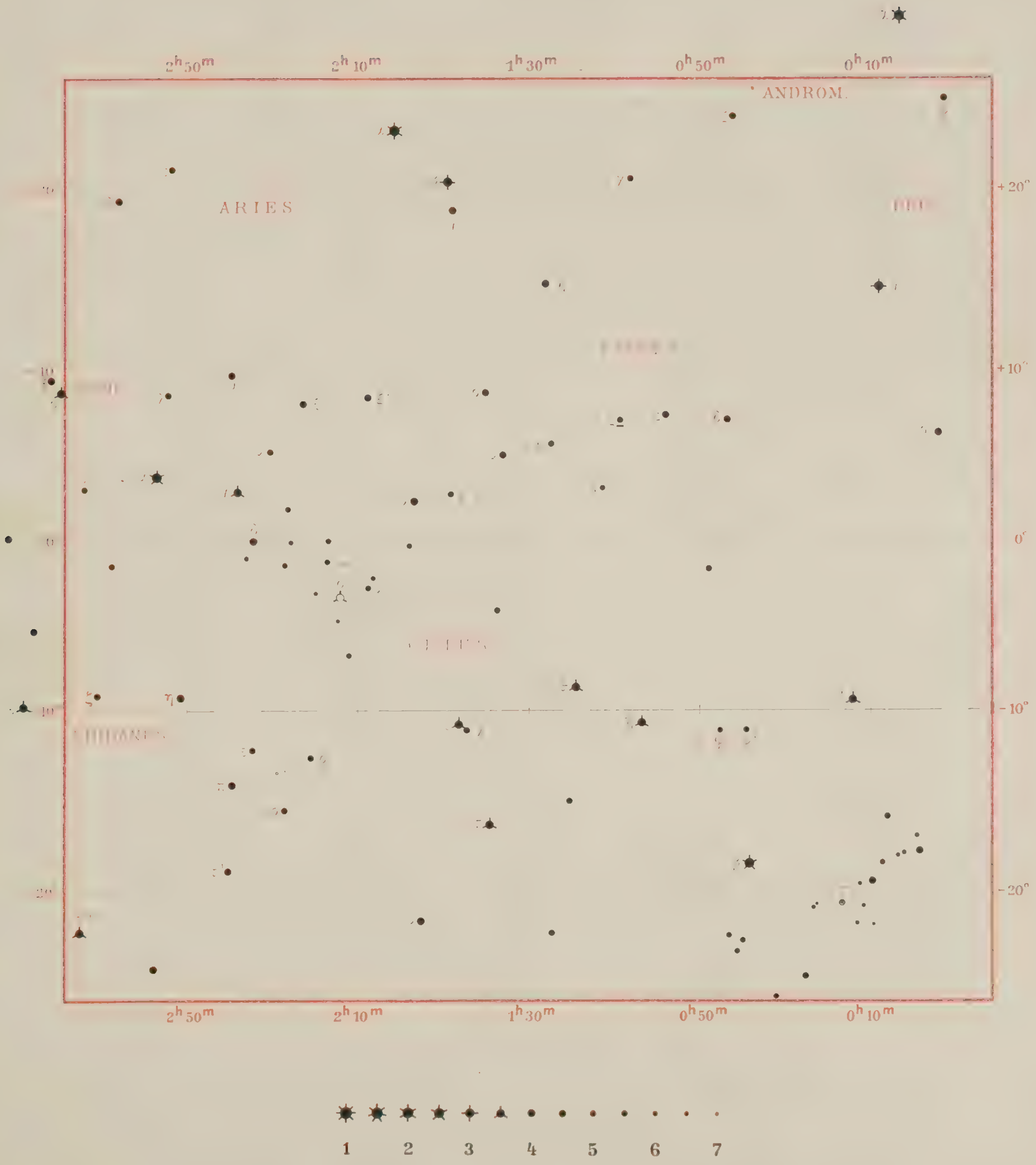
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Charta II.

100 T **Ceti,** Magn.: 5—6½.
— 806 *o* **Ceti,** Magn.: 3½—9.



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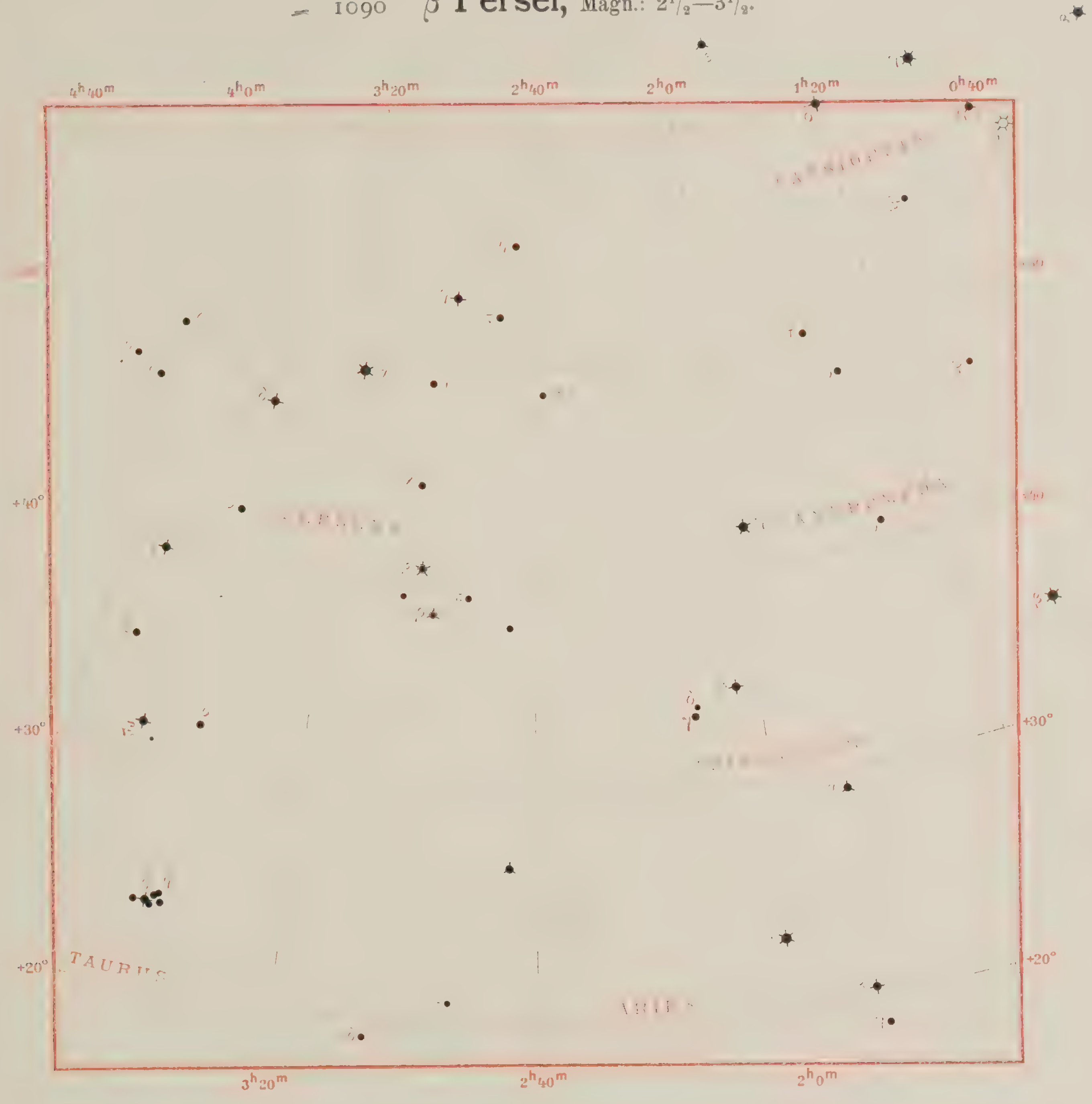
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Charta III.

1072 ϱ **Persei**, Magn.: $3^1/_2$—4.

1090 β **Persei**, Magn.: $2^1/_2$—$3^1/_2$.



1 2 3 4 5 6 7

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Charta IV.

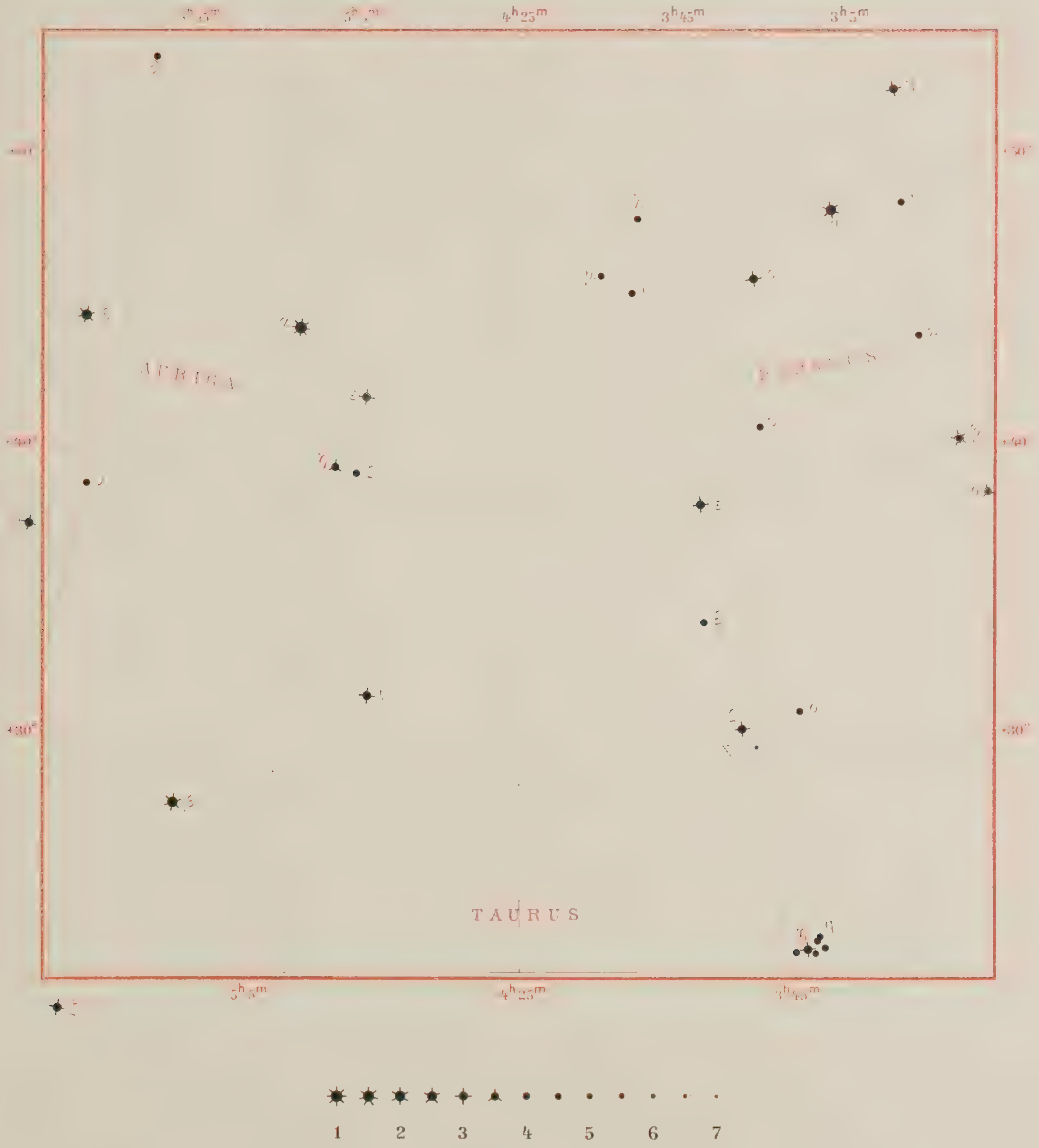
1411 λ Tauri, Magn.: 3½—4.



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Charta V.

1768 ε **Aurigae,** Magn.: 3—4½.

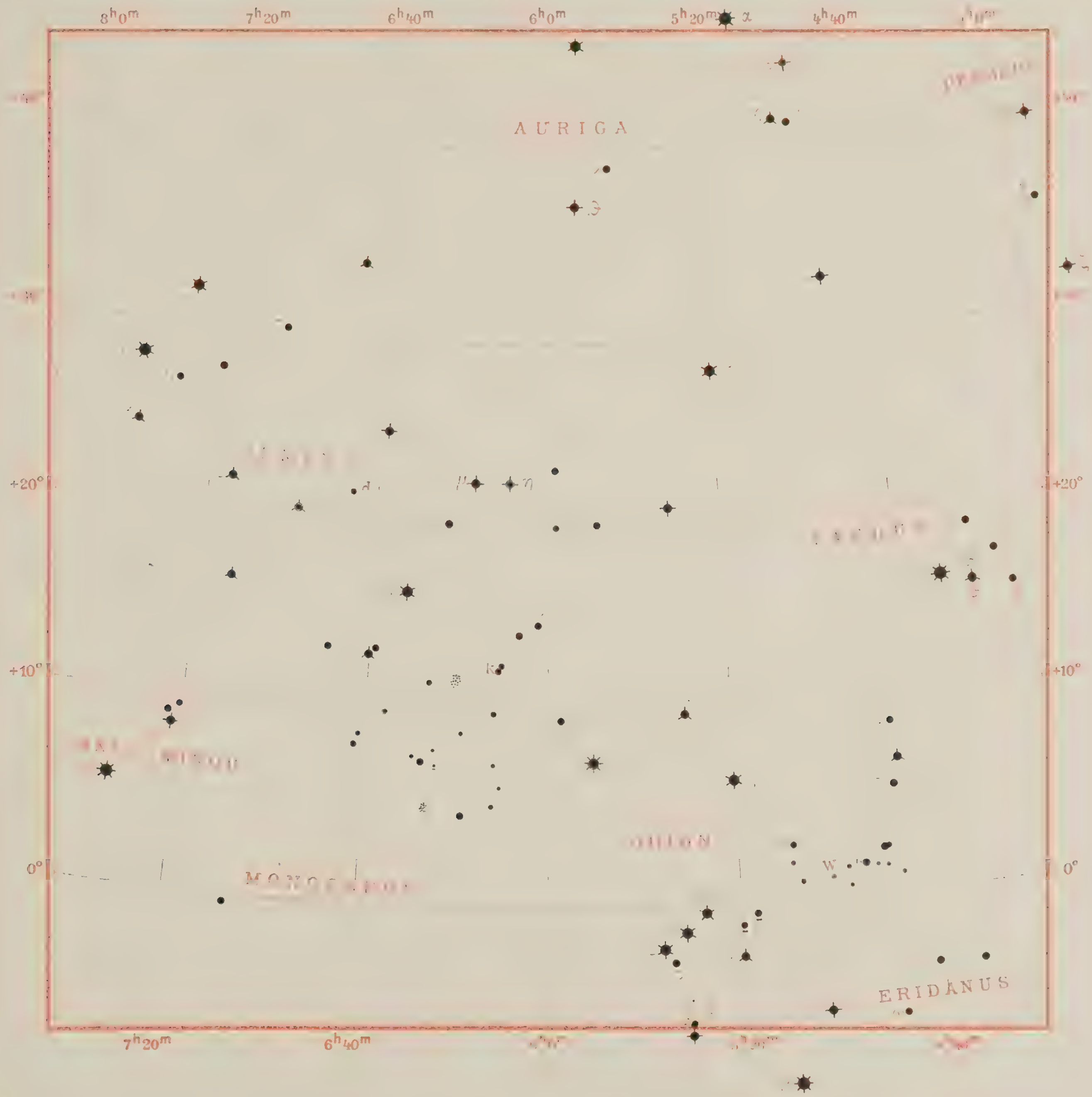


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Charta VI.

1800 W Orionis, Magn.: 6–7. 2098 α Orionis, Magn.: 1–1½.
2213 η Geminorum, Magn.: 3–4. 2279 T Monocerotis, Magn.: 6–7½.
— 2509 ζ Geminorum, Magn.: 3½–4½.





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Charta VII.

2610 R **Canis Maioris,** Magn.: 6—6½.



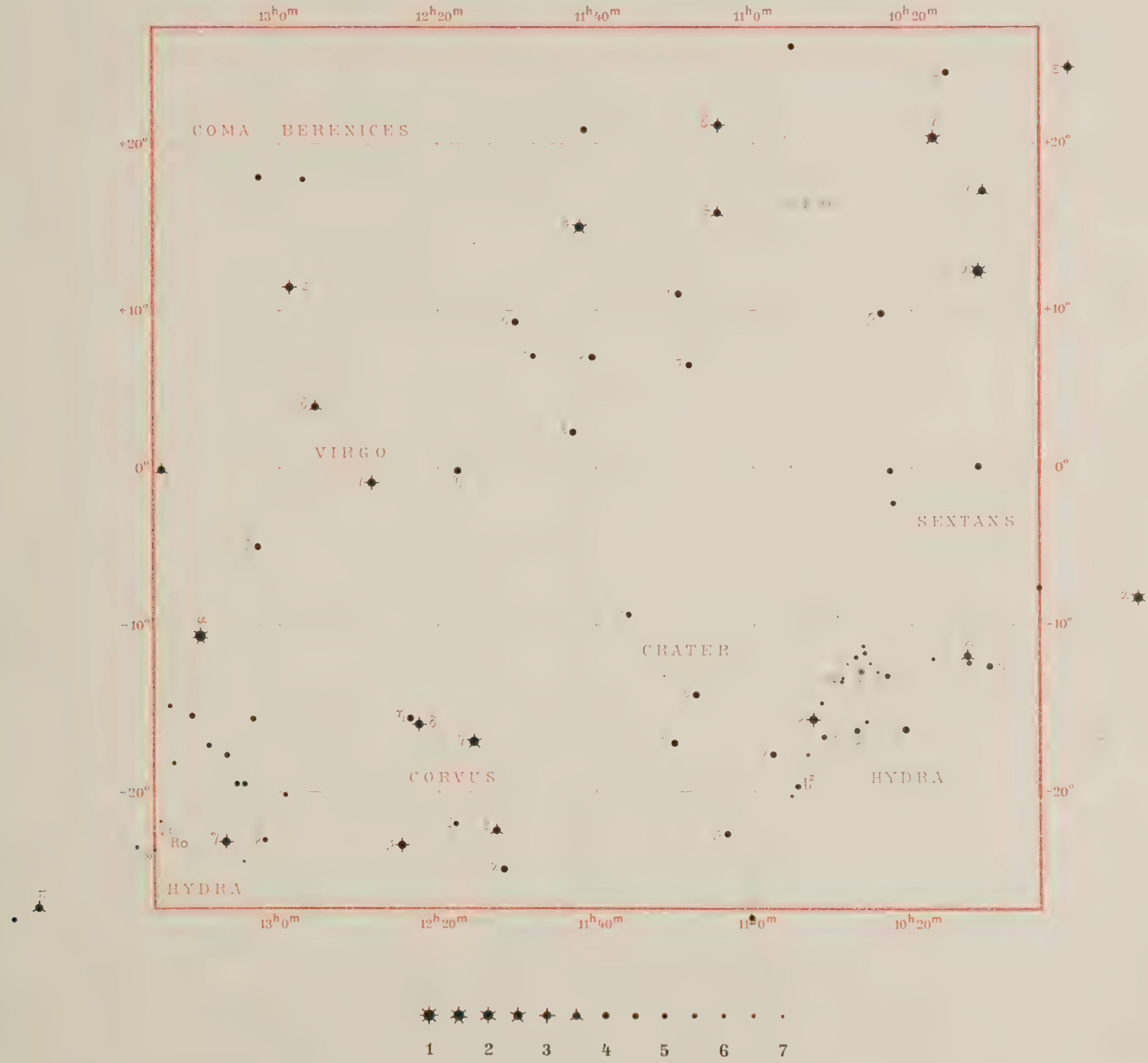


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Charta VIII.

3796 **U Hydrae,** Magn.: $4^1/_2$—6.
4826 **R Hydrae,** Magn.: $4^1/_2$—10.



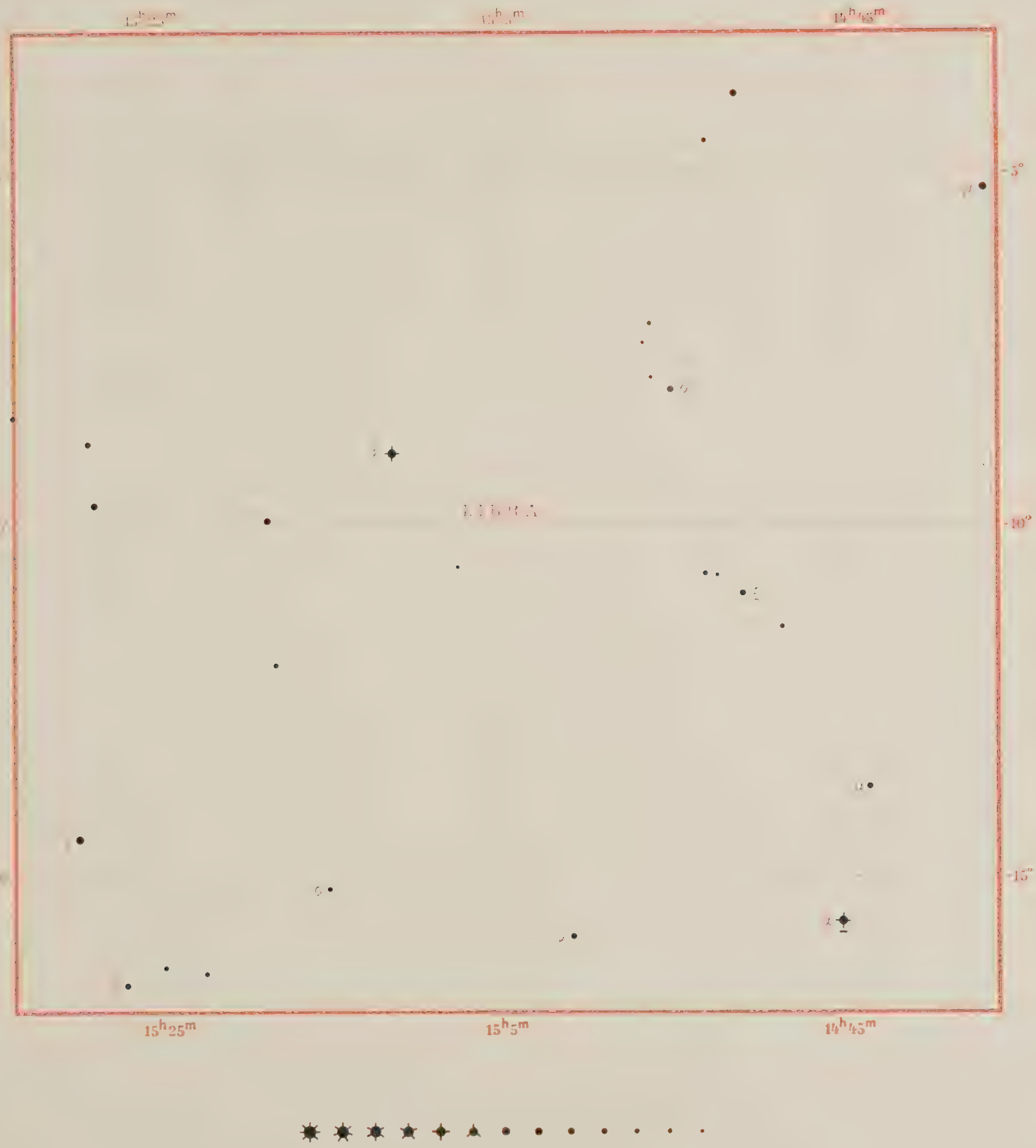
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Charta IX.

5374 *δ* **Librae,** Magn.: 5—6.



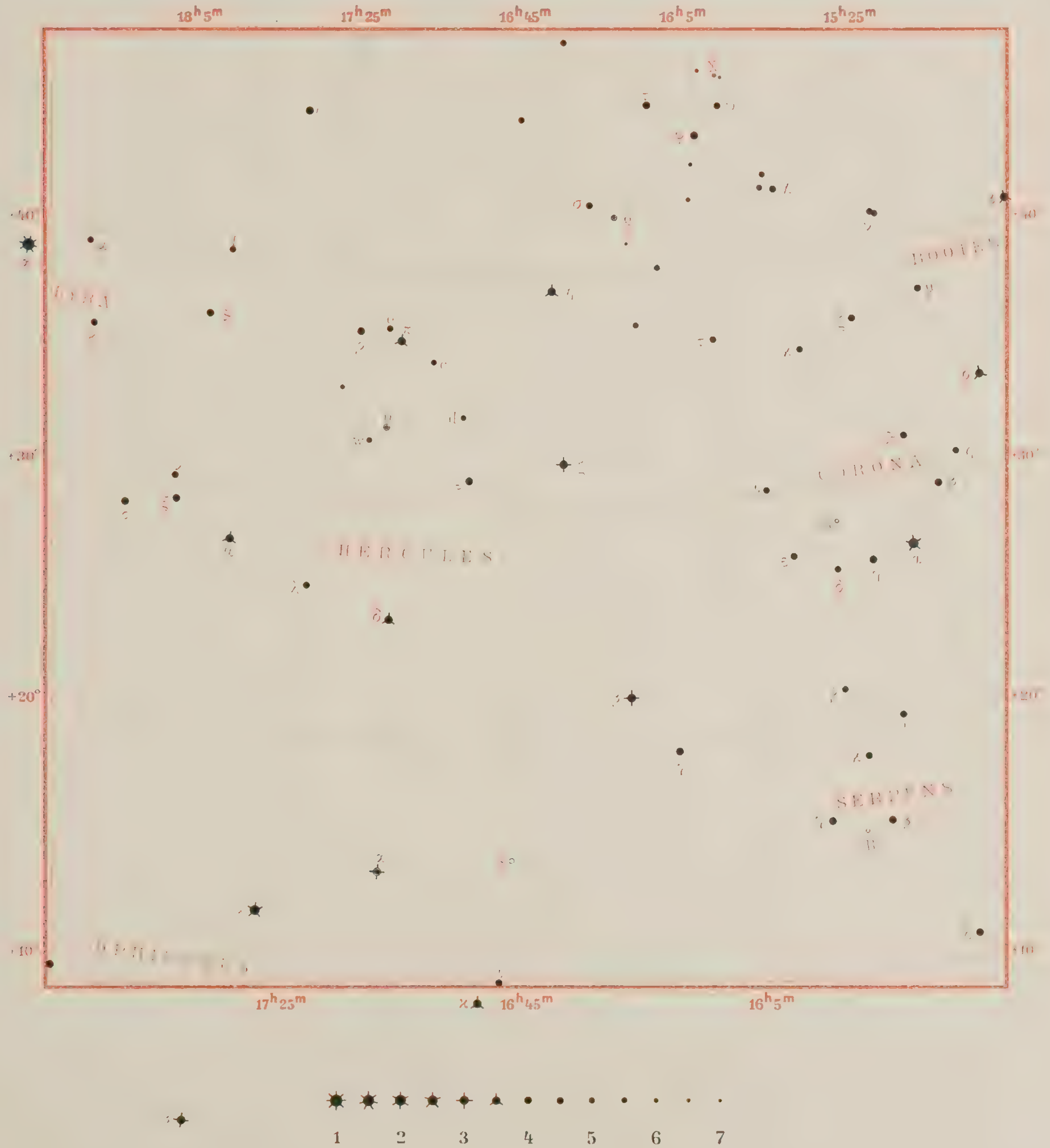
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Charta X.

5758 X **Herculis,** Magn.: 6—7. 5912 g **Herculis,** Magn : 5—5$^1/_2$.
6181 *α* **Herculis,** Magn.: 3—4. 6202 u **Herculis,** Magn.: 4$^1/_2$—5$^1/_2$.

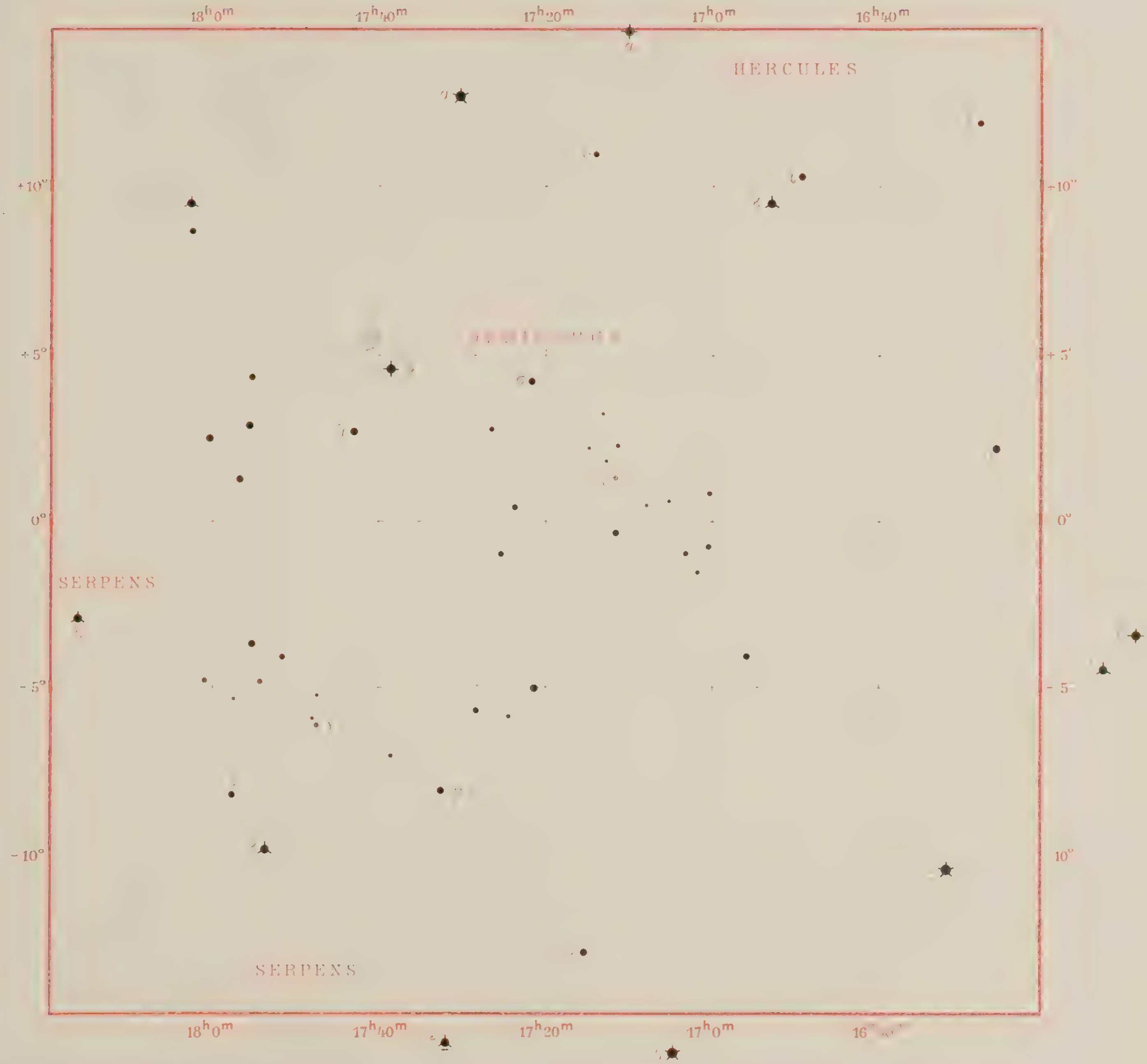


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Charta XI.

6189 **U Ophiuchi,** Magn.: 6—6½.
6404 **Y Ophiuchi,** Magn.: 6—7.





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Charta XII.

6368 **X Sagittarii,** Magn.: 4—6.
6472 **W Sagittarii,** Magn.: 5—6.
6573 **Y Sagittarii,** Magn.: 6—6½.



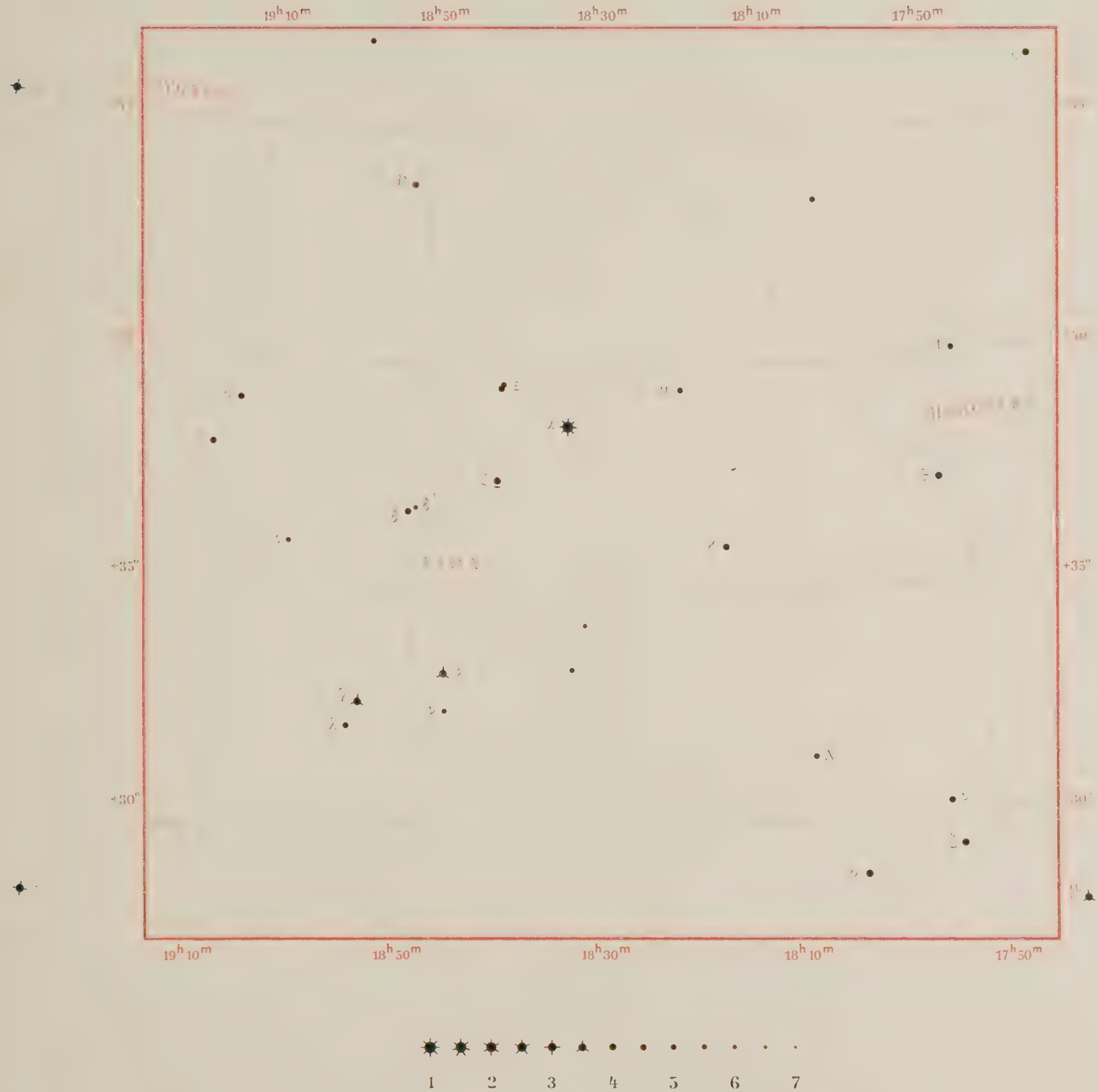


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Charta XIII.

6758 *β* **Lyrae,** Magn.: 3½—4½.
6794 R **Lyrae,** Magn.: 4—4½.



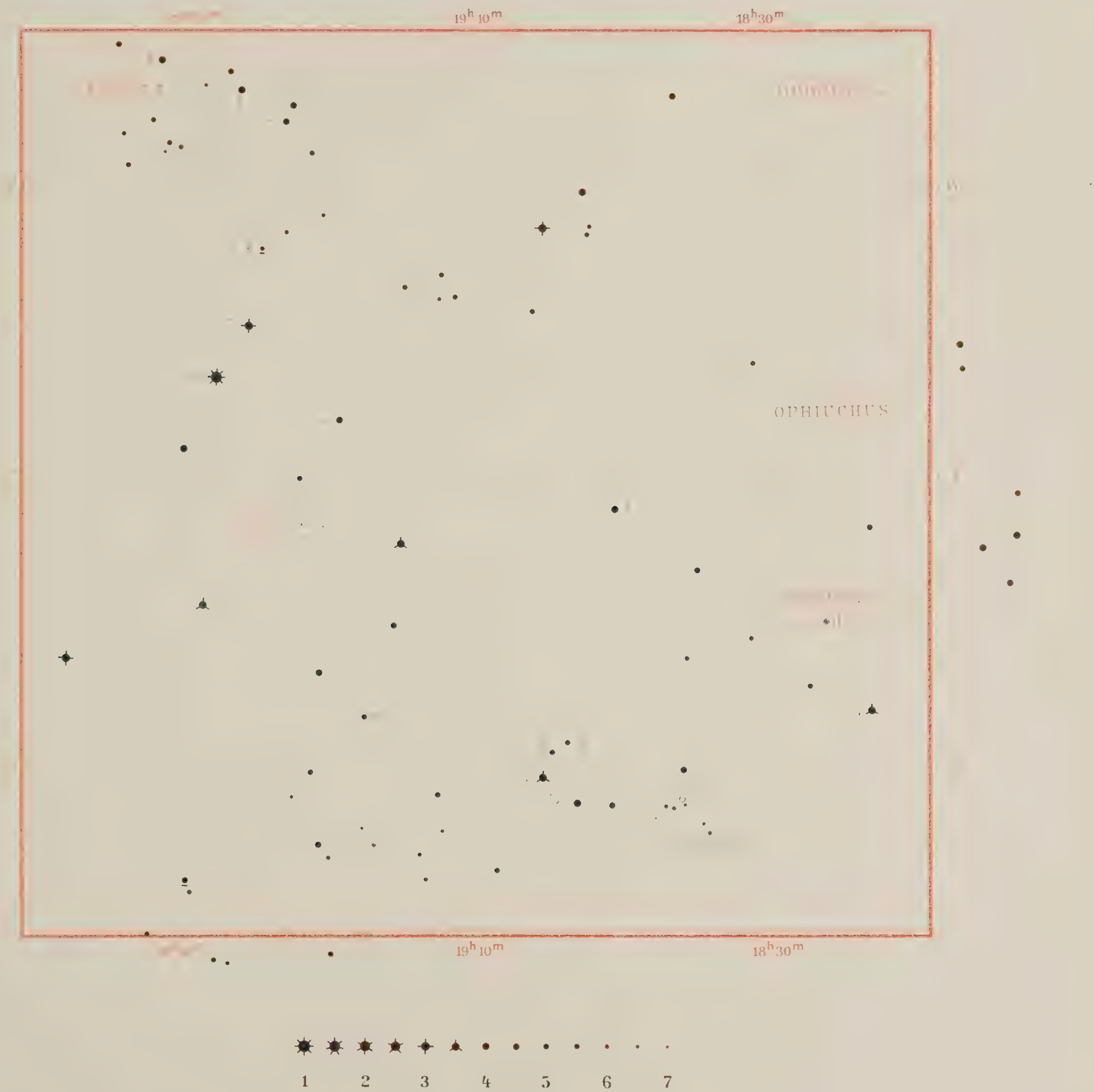
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Charta XIV.

6613 d **Serpentis,** Magn.: 5—5½. 6733 R **Scuti,** Magn.: 5—7½.
6984 U **Aquilae,** Magn.: 6—7. 7124 η **Aquilae,** Magn.: 3½—4½.
7149 S **Sagittae,** Magn.: 5½—6½.



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Charta XV.

7120 χ **Cygni,** Magn.: 5—13½. 7437 X **Cygni,** Magn.: 6½—7½.

7483 T **Vulpeculae,** Magn.: 5½—6½. 7754 W **Cygni,** Magn.: 5½—6½.





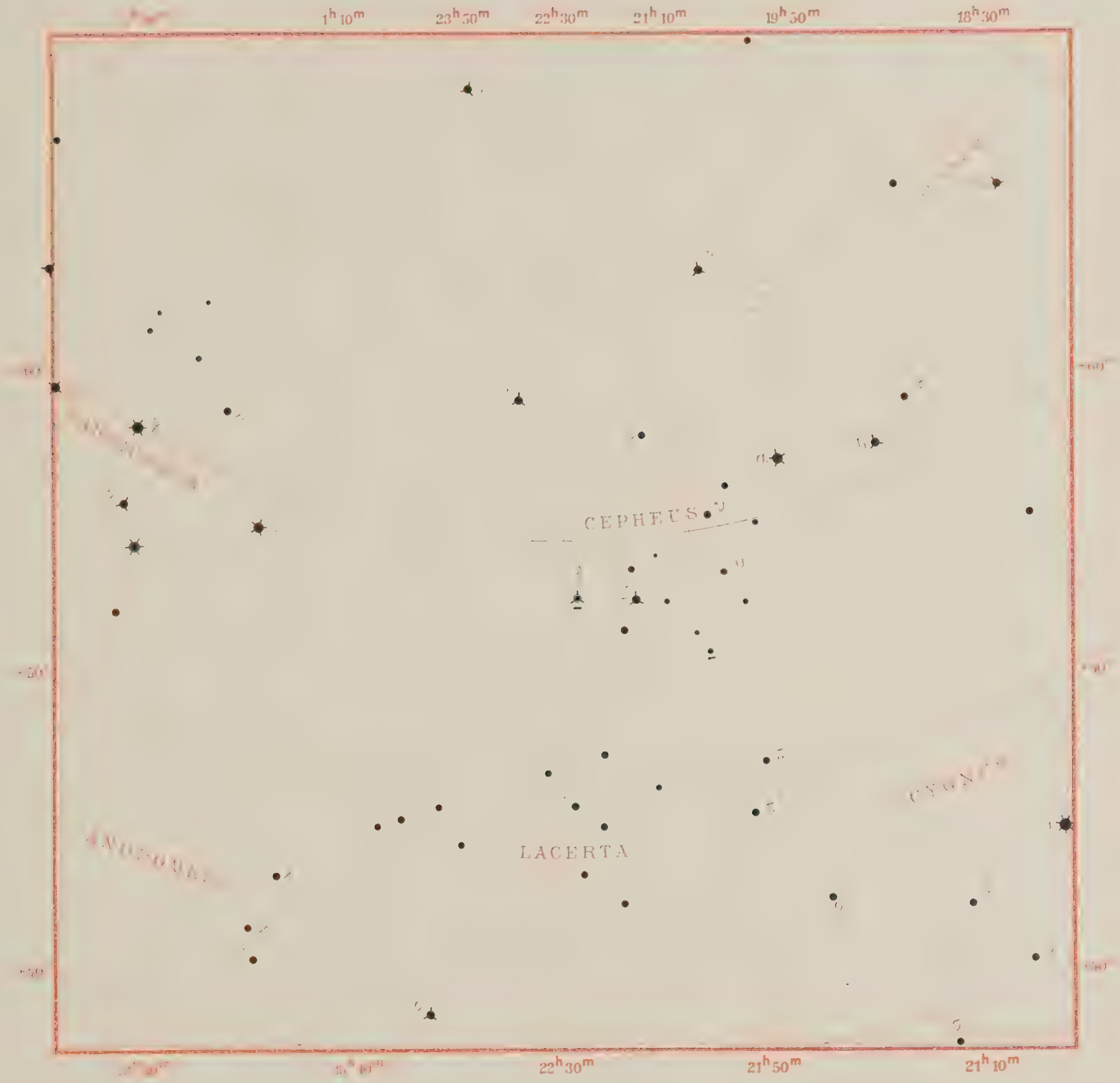
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Charta XVI.

391 32 **Cassiopeiae,** Magn.: $5^1/_2$—6.
7803 μ **Cephei,** Magn.: 4? – 5?
– 8073 δ **Cephei,** Magn.: $3^1/_2$—5.





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Charta XVII.

8273 β **Pegasi,** Magn.: 2—2½.





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[illegible]

Charta XVIII.

2583 L² Puppis, Magn.: 3½—6½.
2852 V Puppis, Magn.: 4—5.



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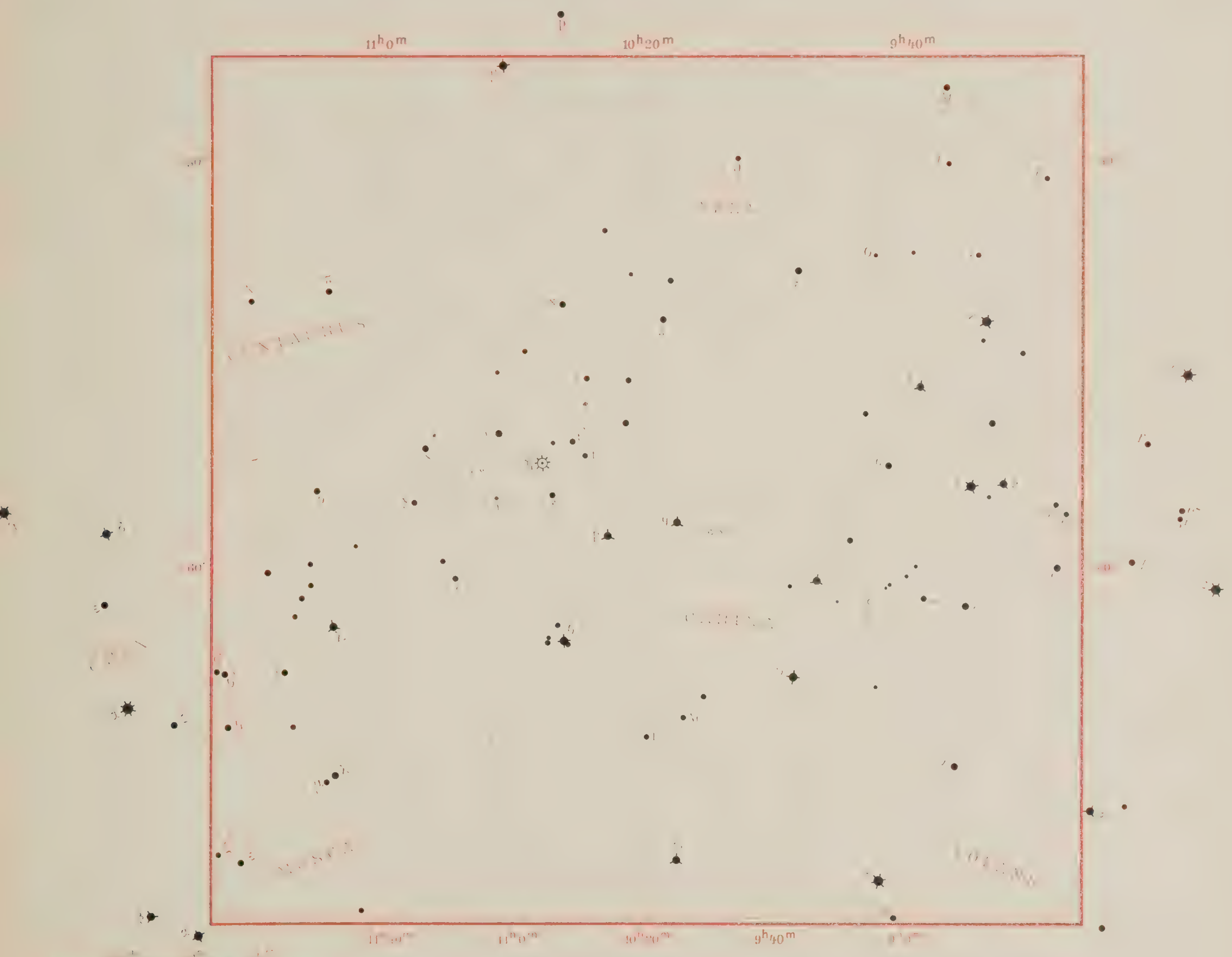
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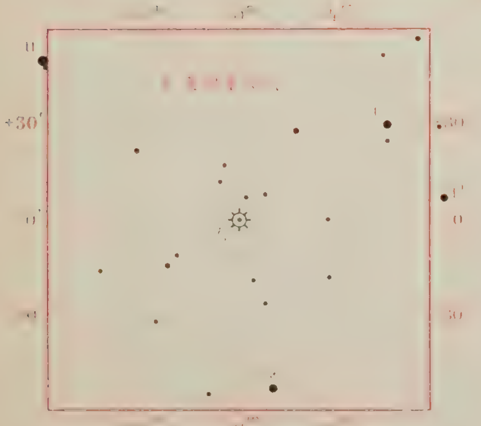
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Charta XIX.

3409 **N Velorum,** Magn.: $3^1/_2$—$4^1/_2$? 3495 **l Carinae,** Magn.: $3^1/_2$—5.

3418 **R Carinae,** Magn.: 5—$9^1/_2$. 3847 **η Carinae,** Magn.: >1—7,5.







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Charta XX.

5013 *θ* **Apodis,** Magn.: 5½—6½.
5319 R **Apodis,** Magn.: 5½—6?



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Charta XXI.

6760 ϰ **Pavonis**, Magn.: 4—5½.





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